Error Messages

Agilent Technologies
ESG Vector Signal Generator

This guide applies to signal generator models and associated serial number prefixes listed below. Depending on your firmware revision, signal generator operation may vary from descriptions in this guide.

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Contents

Contents

1   Error Messages

Introduction

If an error condition occurs in the signal generator, it is reported to both the front panel display error queue and the SCPI (remote interface) error queue. These two queues are viewed and managed separately.

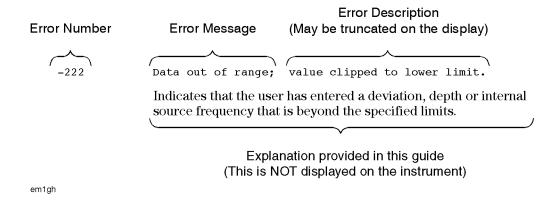| NOTE | When there is an unviewed message in the front panel error queue, the ERR annunciator appears on the signal generator's display. |

Characteristic	Front Panel Display Error Queue	SCPI Remote Interface Error Queue
Capacity (#errors)	30	30
Overflow Handling	Circular (rotating). Drops oldest error as new error comes in.	Linear, first-in/first-out. Replaces newest error with: -350, Queue overflow
Viewing Entries	Press: **Utility** > **Error Info** > **View Next** (or **Previous**) **Error Message**	Use SCPI query SYSTem:ERRor[:NEXT]?
Clearing the Queue	Press: **Utility** > **Error Info** > **Clear Error Queue(s)**	Power up Send a *CLS command Read last item in the queue
Unresolved Errors (errors that must be resolved. For example: unlock, avalanched, **and** hi/lo)	Re-reported after queue is cleared.	Re-reported after queue is cleared.

Error Message Format

When accessing error messages through the front panel display error queue, the error numbers, messages and descriptions are displayed on an enumerated ("1 of N") basis. When accessing error messages using the SCPI (remote interface) error queue, the error numbers and the <error_description> portions of the error query response are displayed on the host terminal.

In this guide, an explanation is generally included with each error to further clarify its meaning. The error messages in this guide are listed numerically. In cases where there are multiple listings for the same error number, the messages are in alphabetical order, excluding simple words like "the" and "it".

Error messages appear in the lower-left corner of the display as they occur.

Error Number   Error Message

Error Description
(May be truncated on the display)

-222   Data out of range;   value clipped to lower limit.

Indicates that the user has entered a deviation, depth or internal source frequency that is beyond the specified limits.

Explanation provided in this guide
(This is NOT displayed on the instrument)

em1gh

Error Message Types

Events do not generate more than one type of error. For example, an event that generates a query error will not generate a device-specific, execution, or command error.

Query Errors (–499 to –400) indicate that the instrument's output queue control has detected a problem with the message exchange protocol described in IEEE 488.2, Chapter 6. Errors in this class set the query error bit (bit 2) in the event status register (IEEE 488.2, section 11.5.1). These errors correspond to message exchange protocol errors described in IEEE 488.2, 6.5. In this case:

- Either an attempt is being made to read data from the output queue when no output is either present or pending, or

- data in the output queue has been lost.

Device Specific Errors (–399 to –300 and 201 to 703) indicate that a device operation did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

The <error_message> string for a *positive* error is not defined by SCPI. A positive error indicates that the instrument detected an error within the GPIB system, within the instrument's firmware or hardware, during the transfer of block data, or during calibration.

Execution Errors (–299 to –200) indicate that an error has been detected by the instrument's execution control block. Errors in this class set the execution error bit (bit 4) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either a <PROGRAM DATA> element following a header was evaluated by the device as outside of its legal input range or is otherwise inconsistent with the device's capabilities, or

- a valid program message could not be properly executed due to some device condition.

Execution errors are reported *after* rounding and expression evaluation operations are completed. Rounding a numeric data element, for example, is not reported as an execution error.

Command Errors (–199 to –100) indicate that the instrument's parser detected an IEEE 488.2 syntax error. Errors in this class set the command error bit (bit 5) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either an IEEE 488.2 syntax error has been detected by the parser (a control-to-device message was received that is in violation of the IEEE 488.2 standard. Possible violations include a data element that violates device listening formats or whose type is unacceptable

to the device.), or

- an unrecognized header was received. These include incorrect device-specific headers and incorrect or unimplemented IEEE 488.2 common commands.

0: No Error

0   No error, No Error Message(s) in Queue

The queue is empty. Every error in the queue has been read, or the queue was purposely cleared using the Clear Error Queue(s) softkey or *CLS.

-499 to -400: Query Errors

The instrument's output queue control has detected a problem with the message exchange protocol described in IEEE 488.2, Chapter 6. Errors in this class set the query error bit (bit 2) in the event status register (IEEE 488.2, section 11.5.1). These errors correspond to message exchange protocol errors described in IEEE 488.2, 6.5.

In this case, either an attempt is being made to read data from the output queue when no output is either present or pending, or data in the output queue has been lost.

-440   Query UNTERMINATED after indefinite response

A query was received in the same program message in which a query requesting an indefinite response was executed (see IEEE 488.2, 6.3.7.5).

-430   Query DEADLOCKED

A condition causing a DEADLOCKED query error occurred (see IEEE 488.2, 6.3.1.7). For example, both the input buffer and the output buffer are full and the device cannot continue.

-430   Query DEADLOCKED

A SCPI output queue has filled, preventing further SCPI command execution, and there is no more room left in the corresponding SCPI input queue to accept a query to read from the output queue. The system automatically discards output to correct the deadlock.

-420   Query UNTERMINATED

A condition causing an UNTERMINATED query error occurred (see IEEE 488.2, 6.3.2.2). For example, the device was addressed to talk and an incomplete program message was received.

-410   Query INTERRUPTED

A condition causing an INTERRUPTED query error occurred (see IEEE 488.2, 6.3.2.7). For example, a query was followed by DAB or GET before a response was completely sent.

-**400**   Query Error

This is a generic query error for devices that cannot detect more specific errors. The code indicates only that a query error as defined in IEE 488.2, 11.5.1.1.7 and 6.3 has occurred.

-399 to -300: Device-Specific Errors

Some device operations did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

-350	Queue overflow

This is a specific code entered into the queue in lieu of the code that caused the error. This message indicates that there is no more room in the queue and an error occurred but was not recorded.

-340	Calibration failed

The device has detected a failure during its calibration procedure.

-330	Self-test failed; Demodulator board.

The demodulator board failed to power up properly. Report this error to Agilent Technologies.

-321	Out of memory; Arb file selection failed. File system failed to access required file. Some table editor files may be corrupted.

There was a problem accessing a required file.

-321	Out of memory; ARB is not functional.

There is insufficient memory to the ARB to generate the requested waveform.

-321	Out of memory; BBG 3GPP cannot function correctly.

3GPP cannot function properly due to a dynamic memory allocation failure.

-321	Out of memory; Burst shape subsystem unable to operate.

Operations on a burst shape could not be completed because of insufficient memory.

-321   `Out of memory; Cannot convert binary file to bit file.`

There is not enough memory to convert a binary file to a bit file. Reduce the size of any sweep lists and try again.

-321   `Out of memory; Cannot precalculate frequencies. Try fewer`
             `frequencies.`

Indicates that memory was exhausted during frequency precalculation (used to speed the process of sweep/list mode). List mode cannot run until either fewer frequencies have been supplied or more memory becomes available and the same set of frequencies are sent again, `FREQ:MODE CW` is executed, or `:FREQ:MODE LIST` is executed.

-321   `Out of memory; Complementary Cumulative Distribution. Display`
             `cannot function.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Could not construct conflict object.`

This error is reported when an attempt to obtain a new W-CDMA downlink conflicts checking object fails due to an out of memory error.

-321   `Out of memory; Could not copy current istate.`

An instrument state operation, such as save/recall, could not allocate enough space to copy an instrument state. The operation is aborted.

-321   `Out of memory; Display system out of memory. An abnormal`
             `display may result. Memory consumption should be reduced.`

There was not enough memory in the system to properly update the display. Some inconsistencies may be seen. The size of any list/sweep file should be reduced, and the source should be preset to clear up any inconsistencies. Report this error to Agilent Technologies.

-321   Out of memory; <DISPLAY TYPE> display cannot function.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   Out of memory; FFT subsystem unable to function.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   Out of memory; <FILE NAME>

A file system operation (such as saving a file) has failed due to a lack of memory in the system. Reduce memory usage and try again.

-321   Out of memory; FIR subsystem unable to operate.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   Out of memory; Graph subsystem cannot function.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   Out of memory; High Amplitude is less than Low Amplitude.

The specified high amplitude value is smaller than the low amplitude value for a sensitivity search measurement. No measurement is performed.

-321   Out of memory; Histogram display cannot function.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   Out of memory; Impulse response display cannot function.

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; I/Q map display cannot function.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Memory allocation error.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Memory allocation error. Data will be incorrect.`

A memory allocation error occurred while trying to create a string of bits. Report this error to Agilent Technologies.

-321   `Out of memory; Memory catalog failed.`

There is not enough memory to complete a catalog listing. Reduce the size of any sweep lists and try again.

-321   `Out of memory; Modulation subsystem unable to operate.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Not enough Waveform Memory on BBG<NUMBER>.`

There is not enough memory left on the baseband board to generate the required baseband file. Remove files (for example, ARB files) that might have been previously downloaded and are no longer required, select different parameters that require a smaller file, or upgrade to a baseband option with larger memory.

-321   `Out of memory; Not enough memory to buffer paging message.`

There is not enough memory to buffer the asynchronous paging message, so it will not be played. Reduce the size of any list/sweep file, and preset the source to clear up any inconsistencies. If the problem persists report this error to Agilent Technologies.

-321   `Out of memory; Not enough memory to read data file.`

There is not enough memory to read the specified data file. Try a smaller file. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to Agilent Technologies.

-321   `Out of memory; The pre-coding bit data for this transport`
      `channel is not generated due to the memory overflow or memory`
      `allocation error.`

Reduce the amount of coding applied to data or decrease the amount of data.

-321   `Out of memory; Shape subsystem unable to operate.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Simulation requires <numpoints> points free in`
      `ARB memory.`

The simulation cannot occur until the specified number of points are available in ARB memory. Increase the amount of available ARB memory by deleting files and try again.

-321   `Out of memory; SMI is not functional.`

There is insufficient memory for the SMI to generate its cal data.

-321   `Out of memory; The table editor cannot function properly until`
      `more memory is available.`

There is insufficient working memory available. Reduce the size of any sweep lists and try again.

-321   `Out of memory; There is not enough memory to create the`
      `modulation. Baseband cannot function.`

There is not enough memory to create the modulation map. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to Agilent Technologies.

-321   `Out of memory; Unable to display format window.`

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to Agilent Technologies. The instrument is still functional.

-321   `Out of memory; Unable to display bert window.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Unable to display Opt 300 GSM bert window.`

There is insufficient working memory available. Report this error to Agilent Technologies.

-321   `Out of memory; Unable to display protocol window.`

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to Agilent Technologies. The instrument is still functional.

-321   `Out of memory; Unable to display timeslot window.`

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to Agilent Technologies. The instrument is still functional.

-315   `Configuration memory lost; Persistent state checksum is bad. Using factory defaults.`

The persistent state is corrupt and had to be reinitialized with the factory preset values.

-315   `Configuration memory lost; Persistent state preset. Using factory defaults.`

The persistent state has been forced to return to factory preset values.

-315   Configuration memory lost; Persistent state version is bad.
             Using factory defaults.

             The persistent state version is not recognized as valid and is assumed to be
             corrupt. The persistent state is reinitialized with the factory preset values.

-313   Calibration memory lost; Cannot store cal to backup: <VALUE>.

             Cannot store specified cal to backup because of a file error.

-313   Calibration memory lost; Cal not found and was created:
             <file name>.

             The specified cal file was not found so it was created by the system.

-313   Calibration memory lost; Cal out of mem: <file name>.

             Inadequate memory for specified cal file.

-313   Calibration memory lost; Cal resizing: <file name>.

             Inadequate memory to resize specified cal file.

-313   Calibration memory lost; Cal restored from backup: <file name>.

             A specified calibration file was restored from backup. Main flash memory
             was lost due to a power failure or a similar interruption.

-313   Calibration memory lost; Cannot restore cal from backup:
             <VALUE>.

             Cannot restore specified cal from backup because of a file error.

-313   Calibration memory lost; Cannot store cal: <VALUE>.

             Cannot restore specified cal because of a file error.

-313   Calibration memory lost; Error occurred while trying to load
             data from previous internal IQ calibration.

             An expected file was not found while trying to load internal IQ calibration
             data.

-311   `Memory error; Unable to configure Save Recall registers from non-volatile memory. Save Recall registers re-initialized.`

Indicates that saved states are no longer usable. Delete explicitly using Catalog.

-310   `System error; <file/device name>.`

A system error occurred while accessing the specified file or device.

-310   `System error; <string>.`

A GPIB/R2D2-specific system error occurred. The string contains information about the error.

-310   `System error; Arb generation failed. File System failed to access required file.`

There was a problem opening, reading, or writing to the specified file.

-310   `System error; Automatic reboot performed due to exception vector <VALUE> at PC 0x<VALUE>.`

An exception occurred at the instruction address.

-310   `System error; Cal in use, cannot delete: <FILENAME>`

Calibration file cannot be deleted since it is currently in use. Error caused by diagnostic command.

-310   `System error; Cannot change manual point until list mode error condition cleared.`

An error is keeping the sweep/list from being able to set the frequency and/or power. Until the problem is addressed, the manual point cannot be changed.

-310   `System error; Could not create percent complete window semaphore.`

When trying to initialize a percent complete window, the needed semaphore could not be created. Report this error to Agilent Technologies.

-310   `System error; Could not limit frequency settings. Please`
             `preset.`

Based on the current frequency settings (multiplier, offset, etc.) the signal generator cannot successfully limit the frequency. Preset the signal generator to ensure that the firmware will return to a valid state.

-310   `System error; Error backing up system files`

Error encountered while writing system files to backup storage.

-310   `System error; Error creating directory: <DIR>.`

Error creating a directory. The directory is shown in the error message.

-310   `System error; Error restoring system files.`

Error encountered while restoring system files from backup storage.

-310   `System error; Error sending RS-232 XON/XOFF`

Caused by framing, parity, or overrun errors during RS-232 communication.

-310   `System error; Error updating RS232 configuration.`

Caused by framing, parity, or overrun errors during RS-232 communication.

-310   `System error; Error updating RS232 RTS line.`

Caused by framing, parity, or overrun errors during RS-232 communication.

-310   `System error; Failed to write file.`

An attempt to write to a file in the internal file system has failed. This may be a temporary condition caused by insufficient disk space or system interaction. Try reducing file system usage and try again. If the problem persists, report this error to the nearest Agilent Technologies sales and service office.

-310   `System error; The File System failed to access one or more required files.`

There was a problem accessing a file that is required for ARB generation. Generation could not be completed.

-310   `System error; File system failed to load/store file <file name>.`

There was a problem either loading or storing the user specified file and the operation was not completed.

-310   `System Error; FIR subsystem generated more coefficients than the hardware can handle.`

The maximum number of coefficients for a given set of hardware has been exceeded. The filter must be created with fewer coefficients.

-310   `System error; Hardware error. Unable to apply phase inversion!`

There is an error with the baseband generator. Try turning the cdma2000 mode off and on again to reset the card. If the problem persists, report this error to Agilent Technologies.

-310   `System error; Incorrect personality active on board <NUMBER>. This operation can only be performed by the "<PERSONALITY NAME>" personality.`

The instrument was unable to find the personality needed to execute the command. Report this error to Agilent Technologies.

-310   `System error; Invalid object.`

An internal error occurred. The file system operation encountered an invalid object.

-310   `System error; Media raw.`

The flash storage media was never formatted or is corrupted.
The system will reformat it now.

-310   `System error; Line: <VALUE> file: <FILE NAME>`

An internal error occurred at the specified location within the specified file.

-310   `System error; Memory already allocated.`

An internal error occurred. The file system operation was already attempted.

-310   `System error; Not implemented.`

An internal error occurred. This functionality is not implemented.

-310   `System error; Null pointer.`

An internal error occurred. The file system operation failed.

-310   `System error; Path too long deleting cal.`

Resulting path to calibration file was too long and file was not removed. Error caused by diagnostic command.

-310   `System error; Receive pace not supported.`

This command is not supported for RS-232 communication.

-310   `System error; Revert to default cal not implemented.`

This command was not implemented.

-310   `System error; RS232 receive error.`

There were framing, parity, or overrun errors during RS-232 communication.

-310   `System error; RS232 send error.`

There were framing, parity, or overrun errors during RS-232 communication.

-310   `System error; RTS pace not supported.`

The RS-232 command is not supported.

-310   `System error; The system was powered off during file system`
                 `update. File system volumes were verified.`

                 This is an informational warning. Powering down the system (turning the
                 power off) during the file system write operation may leave the file system
                 in an inconsistent state. On the next reboot the volume was verified and any
                 errors were repaired.

-310   `System error; Transmit pace not supported.`

                 This command is not supported for RS-232 communication.

-310   `System error; Unknown file system error.`

                 An unspecified internal error occurred.

-310   `System error; Volume already exists: <VALUE>.`

                 An internal error occurred. The attempt to mount volume detected that
                 volume already exists. The system will proceed.

-310   `System error; Volume consistency check failed. Volume needs to`
                 `be reformatted.`

                 The consistency check utility detected that the volume is corrupt and cannot
                 be automatically fixed. Contact service for help.

-310   `System error; Volume failed to mount. It was reformatted.`

                 The volume was reformatted because it failed to mount. It was either
                 completely damaged or never initialized. This error reports the "Success" or
                 "Failure" of the formatting operation. The system will try to proceed either
                 way.

-310   `System error; Volume failed to mount after reformatting:`
                 `<VALUE>`

                 The volume was reformatted successfully, but failed to mount. The storage
                 media could be damaged.

-310   `System error; Volume format failed: <VALUE>`

The formatting of the file system volume failed. The instrument hardware may be damaged.

-310   `System error; Volume reformatted: <VALUE>`

This is an informational error that a file system volume was reformatted because it was damaged or because the formatting was requested by the user.

-310   `System error; Volume verification found error. Volume: <VALUE>`
`Error will be fixed now. Fault code=<NUMBER>`

The volume verification utility encountered a volume error that was fixable. The error was fixed and verification continued.

-310   `System error; Volume verification found error. Volume: <VALUE>`
`This error cannot be fixed. Please reformat the volume. Fault`
`code=<NUMBER>`

The volume verification utility encountered a volume error that was not fixable. The verification continued. The volume should be reformatted to regain stable functionality.

-299 to -200: Execution Errors

An error has been detected by the instrument's execution control block. Errors in this class set the execution error bit (bit 4) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either a <PROGRAM DATA> element following a header was evaluated by the device as outside of its legal input range or is otherwise inconsistent with the device's capabilities, or

- a valid program message could not be properly executed due to a device condition.

Execution errors are reported *after* rounding and expression evaluation operations are completed. Rounding a numeric data element, for example, is not reported as an execution error.

-278   Macro header not found

A syntactically legal macro label in the *GMC? query could not be executed because the header was not previously defined.

-277   Macro redefinition not allowed

The macro label defined in the *DMC command could not be executed because the macro label was already defined (see IEEE 488.2, 10.7.6.4).

-276   Macro recursion error

A syntactically legal macro program data sequence could not be executed because the device found it to be recursive (see IEEE 488.2, 10.7.6.4).

-275   Macro definition too long

A syntactically legal macro program data sequence could not be executed because the string or block contents were too long for the device to handle (see IEEE 488.2, 10.7.6.1).

-274   Macro parameter error

The macro definition improperly used a macro parameter placeholder (see IEEE 488.2, 10.7.3).

-273   Illegal macro label

                 The macro label defined in the *DMC command was a legal string syntax, but
                 could not be accepted by the device (see IEEE 488.2, 10.7.3 and 10.7.6.2).
                 For example, the label was too long, the same as a common command
                 header, or contained invalid header syntax.

-272   Macro execution error

                 A syntactically legal macro program data sequence could not be executed
                 due to an error within the macro definition (see IEEE 488.2, 10.7.6.3).

-271   Macro syntax error

                 A syntactically legal macro program data sequence, written in accordance
                 with IEEE 488.2, 10.7.2, could not be executed due to a syntax error within
                 the macro definition (see IEEE 488.2, 10.7.6.3).

-270   Macro error

                 A macro-related execution error occurred. This error message is used when
                 the device cannot detect the more specific errors described for errors -271
                 through -279.

-261   Math error in expression

                 A syntactically legal expression program data element could not be executed
                 due to a math error. For example, a divide-by-zero was attempted. The
                 definition of a math error is device-specific.

-260   Expression error

                 An expression data element-related error occurred. This error message is
                 used when the device cannot detect the more specific errors described for
                 errors -261 through -269.

-259   Lan setup error; Default Gateway IP address invalid.

                 The selected default gateway IP address is invalid. Check the entry for
                 syntax and numerical errors, and try again.

-259   Lan setup error; IP address and default gateway must be on the
               same subnet.

               The IP address and default gateway do not have the same subnet entry.
               Verify that both addresses are on the same subnet and try again.

-259   Lan setup error; IP address should not be 0 or ending with 0.

               The IP address is invalid. Check the entry for syntax and numerical errors,
               and try again.

-257   File name error; <file name>.

               There was a problem with the specified file name. The name may already be
               used or the syntax may be incorrect.

-257   File name error; Filename cannot contain any directory
               information: <file name>

               This error occurs when a file name with any directory information is used as
               a parameter for the SCPI command RADio:ARB:GENerate:SINE.

-257   File name error; Invalid filename.

               There was a problem with the specified file name. Check the syntax and try
               again.

-257   File name error; Waveform file not selected.

               An error occurred because the ARB generator was turned on with no
               waveform file selected.

-256   File name not found; <file name>.

               This error occurs when an operation fails to find a specified file. The file may
               no longer exist.

-256   File name not found; The modulation type has been defaulted.

               The specified file is not a modulation file type. The default modulation type
               will be used.

-255   Directory full; <file name>

A legal program command or query could not be executed because the media directory was full. The definition of what constitutes a full media directory is device-specific.

-254   Media full; <file name>.

The operation could not be performed because the media was full. Delete some files and try again.

-253   Corrupt media; <media_name>

A source media (possibly EEPROM) for a data file is corrupt. This error is usually seen in conjunction with errors concerning a certain file.

-241   Hardware missing; Cannot access a baseband generator that does not exist.

Tried to retrieve access information that was not created for a given baseband generator. The hardware probably does not exist.

-241   Hardware missing; No Source Module connected

Cannot turn on Source Module Mode if source module is not connected. Check cable connection.

-241   Hardware missing; SIO address does not exist

The expected board is not installed. Report this error to Agilent Technologies.

-233   Invalid version

A legal program data element was parsed but could not be executed because the version of the data is incorrect to the device. This particular error is used when file or block data elements are recognized by the instrument, but cannot be executed for reasons of version incompatibility. For example, a non-supported file version or a non-supported instrument version.

-230   `Data corrupt or stale; <file name>.`

The sequence file that you are attempting to run is the wrong size.

-230   `Data corrupt or stale; EEPROM @ offset 0x<VALUE>: wrote`
                 `0x<VALUE>, read 0x<VALUE>.`

After writing shadow RAM data to EEPROM, a memory comparison
detected a difference. The EEPROM may not be retaining data properly.
Report this error to Agilent Technologies.

-230   `Data corrupt or stale; Either the file is not a bit file, or the`
                 `number of bits specified does not match with the number of data`
                 `bytes in the file.`

An error has occurred while downloading a user file to the Bit memory
catalog. Either the user file is not a bit file, or the number of bits specified in
the SCPI command does not match the number of bytes in the file. Ensure
that the bit specifier matches the actual number of bits in the file.

-230   `Data corrupt or stale; The user file version is not recognized.`
                 `<file name>.`

An error has occurred while loading a user file where the version of the file
is not supported by the existing firmware.

-224   `Illegal parameter value`

This error occurs where an exact value is expected from a list of possibilities.

-224   `Illegal parameter value; Analog bus node not present.`

The analog bus node that was selected is not a valid node in the system.

-224   `Illegal parameter value; Command requires at least one data`
                 `value.`

A modulation type cannot be created without data.

-224   Illegal parameter value; Illegal parallel bus address.

Internal error. The instrument tried to access an illegal parallel bus
address.

-224   Illegal parameter value; Latch name not present.

The latch name that was selected is not a valid latch in the system.

-224   Illegal parameter value; The OSR must be an even value.

RADio:ARB:GENerate:SINE generates a valid sine waveform and the OSR
must be an even value to generate a waveform with an even number of
samples.

-224   Illegal parameter value; Total user file bits must be greater
               than 0.

An attempt was made to select a user file that contains 0 bits. Select another
user file that contains at least 1 bit.

-223   Too much data

A legal program data element of block, expression, or string type was
received that contained more data than the device could handle due to
memory or related device-specific requirements.

-223   Too much data; <file name>.

The specified file was being built up by a SCPI data block transfer when the
memory block allocation failed.

-223   Too much data; The current setting results in too many data
               points. A new symbol map cannot be generated. The IQ Rotation
               has been restored to its previous value.

Due to hardware limitations, only a certain number of unique data points
can be created for the IQ map. IQ rotation is designed to alleviate this
problem, but incorrect use can result in undesirable effects. This error
indicates that the current IQ rotation is optimal and cannot be changed.

-223   Too much data; The current setting results in too many data
            points. A new symbol map cannot be generated. The format has
            been turned off.

            **Due to hardware limitations, only a certain number of unique data points
            can be created for the IQ map. The cdma2000 or W-CDMA mode turns off
            when the power combination of all channels exceed that limit. Adjust the
            channel power level and try again.**

-223   Too much data; The current setting results in too many data
            points. A new symbol map cannot be generated. The format has
            been turned off.

            **Due to hardware limitations, only a certain number of unique data points
            can be created for the IQ map. This channel power level has resulted in an
            IQ map that exceeds the hardware limit when it is turned on, and cannot be
            accommodated. The channel has been turned off to retain a valid signal. To
            turn this channel on, try a different power setting or turn another channel
            off.**

-223   Too much data; The current setting results in too many data
            points. A new symbol map cannot be generated. The current
            channel has been restored to its previous type.

            **Due to hardware limitations, only a certain number of unique data points
            can be created for the IQ map. This channel type, together with its power
            setting, has exceeded that limit. The channel type reverts to its previous
            type to retain a valid signal. To try a different power setting, turn the
            channel off, switch to the desired type, change the power setting, and then
            turn the channel back on.**

-223   Too much data; The current power setting results in too many
            data points. A new symbol map cannot be generated. The current
            channel power has been reverted to its previous value.

            **Due to hardware limitations, only a certain number of unique data points
            can be created for the IQ map. This channel power level has resulted in an
            IQ map that exceeds the hardware limit when turned on, and cannot be
            accommodated. The channel power has been reverted to its previous value
            to retain a valid signal. To turn this channel on, try a different power setting
            or turn another channel off.**

-223   Too much data; The number of carriers exceeds the maximum
                allowed.

                The maximum number of carriers cannot exceed the maximum that is
                defined in the specifications for the personality. Reduce the number of
                carriers and try again.

-223   Too much data; The number of CDMA carriers exceeds the maximum
                allowed.

                The maximum number of CDMA carriers cannot exceed the maximum that
                is defined in the specifications for the personality. Reduce the number of
                carriers and try again.

-223   Too much data; The number of CDMA channels exceeds the maximum
                allowed.

                The maximum number of CDMA channels cannot exceed the maximum that
                is defined in the specifications for the personality. Reduce the number of
                channels and try again.

-223   Too Much Data; The number of list points exceeds the maximum
                allowed.

                Some tables have a maximum number of entries. Sweep/List can only have
                1601 points, for example.

                The baseband generator cannot use an I/Q map that has more than 16
                unique values for both I and Q. You can use global search and replace to
                replace all occurrences of a given value (in both I and Q) with a different
                value.

-223   Too much data; The number of points in the table exceeds the
                maximum allowed.

                This error occurs when you try to create a table that is too big. For example,
                if you enter a list in SCPI that is longer than the maximum allowed length,
                or if you attempt to expand a table and the table is already at its maximum
                length.

-223   Too much data; User filter has too many symbols.

The baseband generator cannot use a filter that has more than 64 symbols.
You may have specified an incorrect over-sample ratio in the filter table
editor.

-222   Data out of range

A legal program data element was parsed but could not be executed because
the interpreted value was outside the legal range defined by the device (see
IEEE 488.2 11.5.1.1.5).

-222   Data out of range; Channel type not allowed for current
                link/config.

The channel type you are trying to add is not supported by the current
cdma2000 link and/or radio configuration.

-222   Data out of range; Manual point exceeds list sizes. Limiting to
                maximum point.

The sweep/list manual point has been reassigned to a smaller number value
due to the longest list decreasing in size or being turned off. Its new value is
the length of the longest enabled list (frequency or power).

-222   Data out of range; Manual point exceeds frequency list size.
                Limiting to maximum point.

The sweep/list manual point has been reassigned to a smaller number value
due to the longest list decreasing in size or being turned off. Its new value is
the length of the frequency list that is the longest enabled list.

-222   Data out of range; Manual point exceeds power list size.
                Limiting to maximum point.

The sweep/list manual point has been reassigned to a smaller number value
due to the longest list decreasing in size, or being turned off. Its new value is
the length of the power list that is the longest enabled list.

-222   Data out of range; Number of parameters are not an even number.

The user flatness calibration points must be an even number.

-222   `Data out of range; OCNS channel(s) power clipped to minimum`
`limit.`

As DPCH channel one power is increased, one or more of the OCNS
channels may be clipped to its minimum power of –40 dBm during channel
balancing.

-222   `Data out of range; Only DEFAULT or USER FILE data type is`
`allowed. Data type is changed to DEFAULT`

Only Default data or user file is valid for Paging channel. Paging data is now
set to default.

-222   `Data out of range; Sequence point exceeds size of active lists.`
`Clipped to maximum list element.`

An error that occurs when in list sweep mode. The index used for
determining the next point to sweep is beyond the valid range for the
current list of points.

-222   `Data out of range; Synthesizer: Frequency out of bounds.`

The signal generator received an internal request for a frequency outside of
its supported frequency range. Report this error to Agilent Technologies.

-222   `Data out of range; Value clipped to available memory.`

There was insufficient memory, so a value was clipped to allow waveform
generation with the available memory. For example: OSR.

-222   `Data out of range; value clipped to lower limit.`

An input value is below the minimum value allowed. Examples are:
frequency setting, reference, or offset; output power; power reference and
offset; modulation depth, deviation, or modulation source frequency;
number of points and start/stop values for list mode; start/stop values for
internal I/Q calibration; sequence or register values (save/recall); dwell time.

-222   Data out of range; value clipped to upper limit.

An input value is above the maximum value allowed. Examples: frequency setting, reference, or offset; output power; power reference and offset; modulation depth, deviation, or modulation source frequency; number of points and start/stop values for list mode; start/stop values for internal I/Q calibration; sequence or register values (save/recall); dwell time.

-221   Settings conflict; 3GPP Uplink AWGN refers PRACH Message Part, but the Message Part is set to off.

The 3GPP Uplink AWGN references the PRACH Message Part as E ref, but the Message Part is set to off. To avoid this, set the Message Part to on.

-221   Settings conflict; At least one of the channels must be on in order to turn the mode on. CDMA2000 has been turned off.

To output a valid RF signal, at least one channel must be turned on. Since all channels are off, cdma2000 mode has been turned off to avoid undefined behavior.

-221   Settings conflict; At least one of the channels must be on in order to turn the mode on. WCDMA has been turned off.

To output a valid RF signal, at least one channel must be turned on. Since all channels are off, W-CDMA mode has been turned off to avoid undefined behavior.

-221   Settings conflict; Burst cannot be on while using AM.

There is a hardware conflict for the burst envelope (I/Q menu) and AM1/AM2. The most recently requested modulation will be turned on. The previous modulation will be turned off.

-221   Settings conflict; Cannot have more than 4 EDGE multiframe timeslots on simultaneously. The selected timeslot has been turned off.

An unsupported timeslot type was encountered. EDGE doesn't support more than 4 multiframe timeslots being turned on.

-221   `Settings conflict; Cannot have uplink protocols while the`
       `control frame is on. Frames 1-17 timeslots changed to downlink.`

       Indicates that in TETRA mode some of the timeslots are set to uplink. When the control frame is turned on in TETRA, all timeslots in all frames must use downlink protocols. The instrument enforces this by reconfiguring the timeslots that are not using downlink protocols when the control frame is switched on.

-221   `Settings conflict; Cannot select uplink protocols while the`
       `control frame is on. Selection changed to custom.`

       Indicates that in TETRA mode an attempt has been made to select uplink protocols while the control frame is switched on. TETRA requires that the control frame be switched off in order to select uplink protocols.

-221   `Settings conflict; Cannot turn AWGN on, option 403 is required`
       `for any AWGN functionality.`

       Option 403 (AWGN) is required to enable the AWGN portion of Option 400 (WCDMA).

-221   `Settings conflict; Cannot update FlexDG with Even Second Delay.`

       There is an error with the current cdma2000 hardware. Try turning the cdma2000 mode off and on again to reset the card. If the problem persists, report this error to Agilent Technologies.

-221   `Settings conflict; Carrier formats must be the same.`

       All digital modulation multicarriers must be the same format.

-221   `Settings conflict; Channel #<NUMBER> must be on for any`
       `transport channel following it to be on. All transport channels`
       `following channel #<NUMBER> have been turned off.`

       Transport channels must be turned on sequentially. Therefore, all transport channels with a higher number than a channel that is turned off will be automatically turned off.

-221   `Settings conflict; Channel #<NUMBER> must be turned on before channel #<NUMBER> can be turned on. Channel #<NUMBER> has been turned off.`

Transport channels must be turned on sequentially. For example, channels 1, 2, and 3 must be turned on before channels 4 through 6 can be activated.

-221   `Settings conflict; Clipping not allowed for CDMA2000 reverse radio configs 1 and 2. Clipping set to 100%.`

The clipping function is not available for the cdma2000 reverse link radio configs 1 and 2. The value is automatically reset to 100% (no clipping).

-221   `Settings conflict; Conflict between code = <PARAM1>, data rate = <PARAM2> sps and code = <PARAM3>, data rate = <PARAM4> sps.`

A channelization code conflict exists between two codes, each at its respective data rate. Params 1 and 3 are channelization codes. Params 2 and 4 are data rates.

-221   `Settings conflict; Conflict between code = <PARAM1>, spread factor = <PARAM2> and code = <PARAM3>, spread factor = <PARAM4>.`

A channelization code conflict exists between two codes, each at its respective spread factor. Params 1 and 3 are channelization codes. Params 2 and 4 are spread factors.

-221   `Settings conflict; Continuous & Discontinuous setting conflict. All selected Continuous timeslots are now set to Discontinuous.`

Indicates that while in TETRA mode, an attempt has been made to simultaneously assign continuous and discontinuous protocols to the timeslots. Continuous and discontinuous protocols cannot coexist in TETRA mode. If a discontinuous protocol is selected for any timeslot, all timeslots' protocols are changed to discontinuous protocols.

-221   `Settings conflict; Continuous protocol timeslots cannot be turned off.`

A continuous protocol timeslot is switched off while in TETRA mode. When a continuous protocol has been selected for a timeslot in TETRA mode, all of the timeslots must be switched on.

-221   Settings conflict; The current data rate is not valid for this
              radio configuration. Data rate changed to the default rate.

              **The new radio configuration does not support the current data rate. The
              data rate is changed to the default rate for the new radio configuration,
              which is 1X for F-FCH and 2X for F-SCH.**

-221   Settings conflict; The current paging indicator (PI) is not
              valid for 2400 bps data rate. The PI has been changed to 0, the
              default.

              **QPCH channel with a data rate of 2400 bps only supports up to 191 paging
              indicators. The PI has been set to 0 (default value) to remain valid for this
              data rate.**

-221   Settings conflict; The current RC or data rate does not support
              turbo coding. Turbo Coding has been turned off.

              **Either the specification or the hardware does not support turbo coding for
              this data rate. Turbo coding is now turned off. If you wish to use turbo
              coding, select a valid data rate and then turn turbo coding on. Data rates
              below 14.4 kbps and the highest data rate for each RC are not valid for turbo
              coding.**

-221   Settings conflict; Data of DPDCH must not be TrCH when method
              of active Compressed Mode is Higher Layer.

-221   Settings conflict; The DCH which is referred by 3GPP Uplink
              AWGN must be on.

              **The DCH which is referred by AWGN Eb Ref is off. To avoid this, set the
              DCH to on.**

-221   Settings conflict; Discontinuous & Continuous setting conflict.
              All selected Discontinuous timeslots are now set to Continuous.

              **Indicates that while in TETRA mode, an attempt has been made to
              simultaneously assign discontinuous and continuous protocols to the
              timeslots. Discontinuous and continuous protocols cannot coexist in
              TETRA mode. If a continuous protocol is selected for any timeslot, all
              timeslots' protocols are changed to continuous protocols.**

-221   Settings conflict; Downlink & Uplink setting conflict. All
               selected Downlink timeslots are now set to Uplink.

               A Downlink timeslot type has been selected while another timeslot(s) has
               Uplink selected. In NADC and PDC digital modulation for bursted data,
               only either Uplink (base to mobile) or Downlink (mobile to base)
               Traffic Channel type can be selected for all timeslots at any one moment. To
               continue data transmission, all Downlink timeslots have been changed to
               the Uplink configuration.

-221   Settings conflict; EDGE BERT requires Multiframe PN Sequence in
               Timeslot E field.

               An unsupported data type was encountered. The measurement timeslot
               requires a multiframe PN sequence in the E field.

-221   Settings conflict; EDGE BERT requires Normal as Timeslot Type.

               An unsupported timeslot type was encountered. The measurement timeslot
               must be designated Normal.

-221   Settings conflict; Enabled mod source conflicts with previously
               enabled mod source. Previous mod disabled.

               The signal generator has three sources: INT, EXT1, and EXT2 that are
               shared by the FM1/PM1, AM1/AM2, FM2/PM2, pulse (INT and EXT2), and
               burst envelope (EXT1 only). Each source can be used by only one modulation
               at a time. If a source is being used by an active modulation, and a request
               for the source is made by another modulation, the first modulation is turned
               off and the second modulation is turned on.

-221   Settings conflict; External data cannot be selected for
               multiple channels. PN9 is automatically selected for <CHANNEL
               NAME>.

               The current hardware only supports one external data source at a time. The
               <CHANNEL NAME> data source has been changed to PN9, the default
               data source.

-221   Settings conflict; FM & PM not allowed.

There is a hardware conflict between FM and PM. The most recently
requested modulation will be turned on, the previous modulation will be
turned off.

-221   Settings conflict; FM1/PM1 value set less than FM2/PM2 value.
              FM2/PM2 changed to match FM1/PM1 value.

The deviation of FM2/PM2 must always be less than or equal to the
deviation settings for FM1/PM1. This error will be reported to the queue
when FM2/PM2 is enabled and FM1/PM1 is also enabled and an adjustment
to either FM1/PM1 deviation causes the FM1 or PM1 deviation to be less
than the FM2 or PM2 deviation. It will also be reported when FM1/PM1 is
being turned on, and the last FM2/PM2 deviation setting is greater than the
current FM1/PM1 deviation setting. In both cases the FM2/PM2 deviation
will be adjusted to match the FM1/PM1 deviation.

-221   Settings conflict; FM2/PM2 value set greater than FM1/PM1
              value. FM1/PM1 changed to match FM2/PM2 value.

FM2/PM2 deviation must be less than or equal to the FM1/PM1 deviation.
This error is reported when both FM1/PM1 and FM2/PM2 are enabled and
an adjustment to either FM2/PM2 deviation causes the FM2 or PM2
deviation to be greater than the FM1 or PM1 deviation. It is also be reported
as FM2/PM2 is turned on, and the last FM1/PM1 deviation setting is less
than the current FM2/PM2 deviation setting. In both cases the FM1/PM1
deviation is adjusted to match the FM2/PM2 deviation.

-221   Settings conflict; The format must be on and fully configured
              for use before being specified as the secondary frame. The
              secondary frame is unchanged.

The secondary frame setup must be completely configured as a stand-alone
setup before being selected for use as a secondary frame. It must have a
format, framing, and at least one timeslot turned on.

-221   Settings conflict; Frame repeat changed to continuous.

Single is not a valid repeat setting for an external data source.

-221   Settings conflict; Frequency list and dwell list are of unequal size. Set one list equal to size one, or make their sizes equal.

The frequency list has more than one element and the dwell list has more than one element, and they are not of equal size. If any of the frequency, power, or dwell lists have more than one element, they must all have the same number of elements. A list of a single element is the same as a list of an equal size with the single element repeated the necessary number of times.

-221   Settings conflict; Frequency list and power list are of unequal size. Turn one off, set one to size one, or make their sizes equal.

The frequency list has more than one element and the power list has more than one element, and they are not of equal size. If any of the frequency, power, or dwell lists have more than one element, they must all have the same number of elements. A list of a single element is the same as a list of an equal size with the single element repeated the necessary number of times.

-221   Settings conflict; The frequency spacing has been limited by the number of carriers.

The maximum frequency spacing depends on the number of carriers in the multicarrier setup.

-221   Settings conflict; The frequency spacing has been limited by the number of tones.

The product of the number of spaces between multitone frequencies and the frequency spacing must be less than or equal to 80 MHz.

-221   Settings conflict; FSK frequency deviation has been limited by the symbol rate.

The maximum FSK frequency deviation depends on the symbol rate.

-221   Settings conflict; FSK frequency deviation has been limited by
            the sample rate.

**The ARB sample rate must be at least 16 times the digital mod FSK
frequency deviation. If this cannot be achieved without exceeding the
maximum sample rate for the current settings, the FSK frequency deviation
will be limited.**

-221   Settings conflict; GSM BERT requires Multiframe PN Sequence in
            Timeslot E field.

**An unsupported data type was encountered. The measurement timeslot
requires a multiframe PN sequence in the E field.**

-221   Settings conflict; GSM BERT requires Normal as Timeslot Type.

**An unsupported timeslot type was encountered. The measurement timeslot
must be designated Normal.**

-221   Settings conflict; In fixed position the block size must be
            either 0 or equal to block set size. The block size has been set
            to the block set size.

**In fixed position mode the block size must be equal to either the block set
size or 0.**

-221   Settings conflict; Incompatible step sweep frequency setting.
            Start, stop, center or span setting changed to be compatible
            with last command.

**Incompatible step sweep frequency setting. Start, stop, center or span
setting changed to be compatible with last command.**

-221   Settings conflict; Incompatible step sweep power setting.
            Start, stop, center or span setting changed to be compatible
            with last command.

**Incompatible step sweep power setting. Start, stop, center or span setting
changed to be compatible with last command.**

-221   `Settings conflict; Internal burst cannot be on with pulse`
        `modulation.`

        There is a hardware conflict between internal burst and pulse modulation.
        The most recently requested modulation will be turned on, the previous
        modulation will be turned off.

-221   `Settings conflict; Invalid Channel Code. Channel code has been`
        `changed to the highest channel code for this symbol rate.`

        An attempt was made to input a channelization code beyond the limitations
        imposed by the symbol rate. The channelization code is reset to the highest
        allowable code for the present symbol rate setting.

-221   `Settings conflict; Invalid Channel Code on DPCH <PARAM1>. The`
        `channel code has been changed from <PARAM2> to <PARAM3>.`

        The channel code is limited by the slot format. Param 1 is the channel
        number. Params 2 and 3 are channelization codes.

-221   `Settings conflict; Invalid Channel Code on OCNS <PARAM1>. The`
        `channel code has been changed from <PARAM2> to <PARAM3>.`

        The channel code is limited by the symbol rate. Param 1 is the channel
        number. Params 2 and 3 are channelization codes.

-221   `Settings conflict; I/Q & AM WB cannot be on at the same time.`

        The modulation types I/Q and AM WB cannot be used at the same time.
        This error is reported when the user attempts to activate one type of
        modulation while the other is activated. The modulation type that was most
        recently requested will be turned on and the modulation that was on at the
        time will be turned off.

-221   `Settings conflict; New hardware settings can no longer support`
        `the last IQ Out selection. IQ Out defaulted to Source 1.`

        Based on new settings in the vector modulation system, a previous setting
        related to the IQ Output (rear panel) is no longer valid. The setting will
        default to the input selected for Source 1.

-221   Settings conflict; Nfirst1 - Nlast1 ≤ 6.

GAP1 is a single frame method gap, and the gap length is more than 7 slots.
DTX slots per frame should be less than 8.

-221   Settings conflict; Nfirst1 ≥ 8 or Nlast1 ≤ 6 or when TGD is not
               Undefined, Nfirst_1 + TGD ≥ 30.

GAP1 is a double frame method gap, and the DTX slots per frame should be
less than 8.

-221   Settings conflict; Nfirst2 - Nlast2 ≤ 6.

GAP2 is a single frame method gap, and the gap length is more than 7 slots.
DTX slots per frame should be less than 8.

-221   Settings conflict; Nfirst2 ≥ 8 or Nlast2 ≤ 6.

GAP2 is a double frame method gap, and the DTX slots per frame should be
less than 8.

-221   Settings conflict; The number of preambles exceeds the that
               allowed at the current Max Power setting. The number of
               preambles has been set to <NUMBER>.

The number of preamble steps cannot be greater than what is allowed by
the difference between the initial and maximum power settings. Use the
following equation to calculate the maximum number of preamble steps:
# of preamble steps = ((max power – initial power) / ramp step size) +1.

-221   Settings conflict; Only ONE user file can be selected for all
               traffic channels. <CHANNEL NAME> is now using <FILE NAME> file.

All traffic channels (F-FCH, F-SCH) can use a user file as a data source, but
they must all use the same user file. The <CHANNEL NAME> data has
been changed to <FILE NAME> file.

-221   Settings conflict; Option 403 is required to be able to turn
               Noise on.

Option 403 (AWGN) is required to enable the AWGN portion of Option 401
(Realtime cdma2000).

-221   Settings conflict; Pattern repeat is changed to continuous
                 because data source is external.

Single is not a valid repeat setting for an external data source.

-221   Settings conflict; PHS or TETRA scramble can not be on when the
                 currently selected modulation type has more than 2 bits per
                 symbol.

**The baseband generator provides modulations with more than 2
bits/symbol. For these modulations, PHS and TETRA scramble are disabled.**

-221   Settings conflict; Power list and dwell list are of unequal
                 size. Set one to size one, or make their sizes equal.

**Both the dwell list and the power list have more than one element, and they
are not of equal size. If any frequency, power, or dwell lists have more than
one element, they must all have the same number of elements. A list of a
single element is the same as a list of an equal size with the single element
repeated the necessary number of times.**

-221   Settings conflict; Pulse period set less than pulse width
                 value. Pulse width changed to match period value.

**A pulse period has been entered that is smaller than the pulse width. The
instrument automatically adjusts the pulse period to match the pulse width.**

-221   Settings conflict; The puncture rate is ≥ 100% on DCH channel
                 <NUMBER>, increase the DPCH Slot Format or edit the DCH fields
                 to reduce the puncture %. All DPCH channels were turned off.

**Transport channels cannot be punctured more than 100%. The slot format
needs to be increased (which in turn increases the symbol rate) on the
underlying DPCH Channel, or the transport channel parameters must be
changed to reduce the puncture percentage. The underlying DPCH channel
has been turned off.**

-221   Settings conflict; The puncture rate is > 60% on <STRING1>
                 channel <PARAM1>, increase the <STRING1> Slot Format or edit
                 the <STRING1> fields to reduce the puncture %.

**The puncture rate of each TrCH should be smaller than 60%. It is shown on
the display as Max Puncture value. Max Puncture is calculated as**

(1 - Puncturing Limit) $\times$ 100. Puncturing Limit is defined at
3GPP STD TS 125 331. To avoid this error, increase the symbol rate of the
physical channel, decrease the number of bits of the TrCH, or align the rate
matching attribute of each TrCH.

-221   Settings conflict; RACH is only defined for Radio
              Configurations 1 and 2. You must set one of these Radio
              Configurations before configuring or using this code channel.

An attempt was made to setup the R-ACH while in a radio configuration
that does not support this channel. This channel is only available in RC1
and RC2. If the R-ACH is the desired channel, you must change to the
proper radio configuration before continuing.

-221   Settings conflict; Ramping step should be 0 when Number of
              Preamble is Infinity.

When the repetition number of PRACH Preambles is set to Infinity, the
ramping step power of Preambles must be 0 dB. This is equivalent to
constant Preamble power configuration.

-221   Settings conflict; RCCCH is only defined for Radio
              Configurations 3 and 4. You must set one of these Radio
              Configurations before configuring or using this code channel.

An attempt was made to setup the R-CCCH while in a radio configuration
that does not support this channel. This channel is only available in RC3
and RC4. If the R-CCCH is the desired channel, you must change to the
proper radio configuration before continuing.

-221   Settings conflict; RDCCH is only defined for Radio
              Configurations 3 and 4. You must set one of these Radio
              Configurations before configuring or using this code channel.

An attempt was made to setup the R-DCCH while in a radio configuration
that does not support this channel. This channel is only available in RC3
and RC4. If the R-DCCH is the desired channel, you must change to the
proper radio configuration before continuing.

-221   Settings conflict; REACH is only defined for Radio
                     Configurations 3 and 4. You must set one of these Radio
                     Configurations before configuring or using this code channel.

                     An attempt was made to setup the R-EACH while in a radio configuration
                     that does not support this channel. This channel is only available in RC3
                     and RC4. If the R-EACH is the desired channel, you must change to the
                     proper radio configuration before continuing.

-221   Settings conflict; RPICH is only defined for Radio
                     Configurations 3 and 4. You must set one of these Radio
                     Configurations before configuring or using this code channel.

                     An attempt was made to setup the R-PICH while in a radio configuration
                     that does not support this channel. This channel is only available in RC3
                     and RC4. If the R-PICH is the desired channel, you must change to the
                     proper radio configuration before continuing.

-221   Settings conflict; RSCH with Turbo coding is only available in
                     Radio Configurations 3 and 4. You must set one of these Radio
                     Configurations to proceed.

                     Turbo coding is only allowed with the R-SCH in RC3 and RC4. If turbo
                     coding is needed, change to the appropriate radio configuration, set up the
                     proper channels in addition to the R-SCH, and turn on turbo coding.

-221   Settings conflict; RSCH is only defined for Radio
                     Configurations 1 and 2. You must set one of these Radio
                     Configurations before configuring or using this code channel.

                     The command attempted to enter a value or setting for the R-SCH in RC1 or
                     RC2. If this is the correct R-SCH, change to the desired radio configuration
                     and resend the command. If not, select the command for the desired R-SCH.
                     Use the following list to determine the correct R-SCH command to use:

                     R-SCH   Used in RC1 and RC2

                     R-SCH1   Used in RC3 and RC4 for channel 4

                     R-SCH2   Used in RC3 and RC4 for channel 2

-221   Settings conflict; RSCH1 is only defined for Radio
               Configurations 3 and 4. You must set one of these Radio
               Configurations before configuring or using this code channel.

               The command attempted to enter a value or setting for the R-SCH1 in RC3
               or RC4. If this is the correct R-SCH, change to the desired radio
               configuration and resend the command. If not, select the command for the
               desired R-SCH. Use the following list to determine the correct R-SCH
               command to use:

               R-SCH   Used in RC1 and RC2

               R-SCH1   Used in RC3 and RC4 for channel 4

               R-SCH2   Used in RC3 and RC4 for channel 2

-221   Settings conflict; RSCH2 is only defined for Radio
               Configurations 3 and 4. You must set one of these Radio
               Configurations before configuring or using this code channel.

               The command attempted to enter a value or setting for the R-SCH in RC3 or
               RC4. If this is the correct R-SCH, change to the desired radio configuration
               and resend the command. If not, select the command for the desired R-SCH.
               Use the following list to determine the correct R-SCH command to use:

               R-SCH   Used in RC1 and RC2

               R-SCH1   Used in RC3 and RC4 for channel 4

               R-SCH2   Used in RC3 and RC4 for channel 2

-221   Settings conflict; The selected Eb Ref channel which 3GPP
               Uplink AWGN refers must be on.

               The physical channel which is refered by AWGN Eb Ref is off. Set the
               channel to On.

-221   Settings conflict; Sequence list not specified.

               A list sweep was attempted, but there was no list specified.

-221   Settings conflict; The state of AWGN's Ec Reference has been
             turned off. EC/No information is no longer valid. Please choose
             a valid EcRef channel type.

**EcRef must be selected as a channel in the "On" state. Since the state of the
channel is now "Off", Ec/No values displayed will be invalid.**

-221   Settings conflict; TGD is not Undefined. TGPL1 × 15 ≥ TGSN +
             TGL2 + TGD. TGD is Undefined. TGPL1 × 15 ≥ TGSN + TGL1.

**TGPL1 is the duration of transmission gap pattern 1. The gap pattern
consists of TGSN, TGD, TGL1, and TGL2. The gap pattern cannot be
generated if the TGPL1 value is too short. TGPL1 should meet the following
condition:
TGD is not Undefined. TGPL1 $\times$ 15 ≥ TGSN + TGL2 + TGD.
TGD is Undefined. TGPL1 $\times$ 15 ≥ TGSN + TGL1.**

-221   Settings conflict; TGD is not Undefined. TGPL2 × 15 ≥ TGSN +
             TGL2 + TGD. TGD is Undefined. TGPL2 × 15 ≥ TGSN + TGL1.

**TGPL2 is the duration of transmission gap pattern 2. The gap pattern
consists of TGSN, TGD, TGL1, and TGL2. The gap pattern cannot be
generated if the TGPL2 value is too short. TGPL2 should meet the following
condition:
TGD is not Undefined. TGPL2 $\times$ 15 ≥ TGSN + TGL2 + TGD.
TGD is Undefined. TGPL2 $\times$ 15 ≥ TGSN + TGL1.**

-221   Settings conflict; The TrCH must be selected in Data on DPDCH
             or Msg Data physical channel setup.

**The TrCH is not selected in DPDCH (Msg Data) physical channel setup in
spite of the fact that 3GPP Uplink AWGN Eb Ref (E ref) refers to DCH
(RACH). Set TrCH as the data type.**

-221   Settings conflict; Turbo Coding is not available in the current
             configuration. Please review your manual for valid
             configurations.

-221   Settings conflict; Turn on channel # <PARAM1> caused the
               puncture rate to exceed the maximum specified rate for at least
               one transport channel. Transport channel <PARAM2> has been
               turned off.

               The puncture rate of each TrCH should be smaller than 60%. It is shown on
               the display as Max Puncture value. Max Puncture is calculated as
               (1 - Puncturing Limit) $\times$ 100. Puncturing Limit is defined at 3GPP STD TS
               125 331. To avoid the error, increase the symbol rate of the physical channel,
               or decrease the number of bits of the TrCHs.

-221   Settings conflict; Unsupported configuration for Pilot Gating.
               Pilot Gating can only be used for the Pilot alone or in
               conjunction with REACH or RCCCH.

               Changing the R-PICH gating from full is only allowed in three channel
               structures: R-PICH, R-PICH with the R-CCCH, or R-PICH with the
               R-EACH.

-221   Settings conflict; Uplink & Downlink setting conflict. All
               selected Uplink timeslots are now set to Downlink.

               An Uplink timeslot type has been selected while another timeslot(s) has
               Downlink selected. In NADC and PDC digital modulation for bursted data,
               only Uplink (base to mobile) or Downlink (mobile to base) Traffic Channel
               type can be selected for all timeslots at any one moment. To continue data
               transmission, all Uplink timeslots have been changed to the Downlink
               configuration.

-221   Settings conflict; User FSK file has deviations which are
               incompatible with the current symbol rate. The modulation type
               has been defaulted.

               A frequency in the selected user FSK file exceeds the maximum possible
               deviation for the current symbol rate. The default modulation type for the
               mode has been selected to resolve the conflict.

-221   Settings conflict; Walsh conflict between: <CHANNEL NAME1> and
                <CHANNEL NAME2>.

There is a Walsh collision between two channels specified. Either one Walsh
code is equal to the other, or it falls under the other Walsh's tree. A Walsh
collision results in an invalid signal. Select a different Walsh code according
to Walsh selection rule.

-221   Settings conflict; Walsh length invalid! Changed to default
                walsh number.

The current Walsh length is invalid for the current data rate. For data rate
2X and above, doubling the rate will half the Walsh space. The channel
Walsh number has been changed to the highest valid Walsh code.

-221   Settings conflict; You may not set Forward Link values while in
                Reverse Link. Reset Link Direction to proceed.

Values or settings for forward link were entered while in reverse link. If
forward link is the desired link direction, set the ESG to forward link first,
and then re-enter the values or settings. However, if reverse link is the
correct link direction, consult the SCPI or key references for the correct
values or settings to enter.

-221   Settings conflict; You may not set Reverse Link values while in
                Forward Link. Reset Link Direction to proceed.

Values or settings for reverse link were entered while in forward link. If
reverse link is the desired link direction, set the ESG to reverse link first,
and then re-enter the values or settings. However, if forward link is the
correct link direction, consult the SCPI or key references for the correct
values or settings to enter.

-221   Settings conflict; You may only set up channels that are part
                of your current radio configuration.

An attempt was made to enter a value or setting for a channel that is not
supported in the current radio configuration. The R-FCH and R-SCH are
supported in all the radio configurations for reverse link. However, the
values or settings allowed for these channels vary according to the radio
configuration used.

-220   Parameter error

A program data element related error has occurred. This particular error
message is used if the device cannot detect a more specific error described
for errors -221 through -229.

-220   Parameter error; Code exceeds spread factor.

The specified file code exceeds the spread factor. The code should always be
less than the spread factor minus one.

-220   Parameter error; Data rate is not valid.

The data rate is not contained in the defined data rate table.

-220   Parameter error; <modulation file name> The modulation type has
                        been defaulted.

The specified file is not a modulation file type so the modulation type has
been defaulted.

-220   Parameter error; Spread factor exceeds maximum allowable spread
                        factor.

The spread factor exceeds the maximum allowable spread factor. The
maximum allowable spread factor is currently 256.

-220   Parameter error; Spread factor not valid.

The spread factor should be a power of 2 that is between 4 and 256.

-215   Arm deadlock

The arm source for the initiation of a measurement is set to GET and a
subsequent measurement query is received. The measurement cannot begin
until a GET is received, but the GET would cause an INTERRUPTED error.

-214   Trigger deadlock

A trigger source for the initiation of a measurement is set to GET and a
subsequent measurement query is received. The measurement cannot begin
until a GET is received, but the GET would cause an INTERRUPTED error.

-213   Init ignored

A request for a measurement initiation was ignored as another
measurement was already in progress.

-213   Init ignored; Cannot initiate sweep in manual mode.

The manual mode is on and therefore the instrument cannot sweep.

-213   Init ignored; Sweep is already continuously initiated.

The list/step sweep is continuously initiated and sweeping, therefore the
command is not allowed according to SCPI standards.

-213   Init ignored; Sweep is already initiated.

The list/step sweep is currently initiated and sweeping, therefore the
command is not allowed according to SCPI standards.

-213   Init ignored; Sweep is off.

A list sweep was requested but list sweep is currently off.

-213   Init ignored; Unable to sweep due to sweep being in an error
                state. The sweep error should be fixed.

The number of list, power, and/or dwell points are in conflict, or a serious
system error has occurred in list/sweep. A previous error report should have
described the error that is stalling list/sweep.

-212   Arm ignored

An arming signal was received and recognized by the device but was
ignored.

-211   Trigger ignored

A GET, *TRG, or triggering signal was received and recognized by the device,
but was ignored because of device timing considerations. For example, the
device was not ready to respond.

-210   Trigger error

A `GET,*TRG,` or a triggering signal could not be executed due to an error.

-202   Settings lost due to rtl

A setting associated with a hard local control (see IEEE 488.2, 5.6.15) was lost when the device changed to LOCS from REMS or to LWLS from RWLS.

-201   Invalid while in local

A command is not executable while the device is in local mode due to a hard local control (see IEEE 488.2, 5.6.1.5). For example, a device with a rotary switch receives a message which would change the switch's state, but the device is in local so the message cannot be executed.

-200   Execution Error

For devices that cannot detect more specific errors, this code indicates only that an execution error as defined in IEEE 488.2, 11.5.1.1.5 has occurred.

-200   Execution Error; Cannot transmit paging message to FlexDG.

There is an error with the cdma2000 hardware. Try turning the cdma2000 mode off and on again to reset the card. If the problem persists, report this error to Agilent Technologies.

-200   Execution Error; Cannot write user file to FlexDG.

There is a hardware error associated with the current CDMA format (cdma2000 or W-CDMA). Try turning the current CDMA format mode off and on again to reset the card. If the problem persists, report this error to Agilent Technologies.

-200   Execution Error; OPC Query Timeout Error: Frequency not settled.

OPC query timeout occurred due to the frequency being unsettled. This is probably related to a hardware failure. Report this error to Agilent Technologies.

-199 to -100: Command Errors

The instrument's parser detected an IEEE 488.2 syntax error. Errors in this class set the command error bit (bit 5) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either an IEEE 488.2 syntax error has been detected by the parser (a control-to-device message was received that is in violation of the IEEE 488.2 standard. Possible violations include a data element which violates device listening formats or whose type is unacceptable to the device.), or

- an unrecognized header was received. These include incorrect device-specific headers and incorrect or unimplemented IEEE 488.2 common commands.

-184	Macro parameter error
	A command inside the macro definition had the wrong number or type of parameters.
-183	Invalid inside macro definition
	The program message unit sequence, sent with a *DDT or a *DMC command, is syntactically invalid (see IEEE 488.2, 10.7.6.3).
-181	Invalid outside macro definition
	A macro parameter placeholder ($<number) was encountered outside of a macro definition.
-180	Macro error
	This error, as well as errors -181 through -189, are generated when defining a macro or executing a macro. This particular error message is used if the device cannot detect a more specific error.
-178	Expression data not allowed
	A legal expression data was encountered, but was not allowed by the device at this point in parsing.

-171   Invalid expression

The expression data element was invalid (see IEEE 488.2, 7.7.7.2). For example, unmatched parentheses or an illegal character.

-170   Expression data error

This error, as well as errors -171 through -179, are generated when parsing an expression data element. This particular error message is used if the device cannot detect a more specific error.

-168   Block data not allowed

A legal block data element was encountered, but not allowed by the device at this point in the parsing.

-161   Invalid block data

A block data element was expected, but was invalid (see IEEE 488.2, 7.7.6.2). For example, an END message was received before the end length was satisfied.

-160   Block data error

This error, as well as errors -161 through -169, are generated when parsing a block data element. This particular error message is used if the device cannot detect a more specific error.

-158   String data not allowed

A string data element was encountered, but not allowed by the device at this point in the parsing.

-151   Invalid string data

A string data element was expected, but was invalid (see IEEE 488.2, 7.7.5.2). For example, an END message was received before the terminal quote character.

-151   Invalid string data; filename too long.

The specified filename exceeds the maximum length.

-150   String data error

This error, as well as errors -151 through -159, are generated when parsing a string data element. This particular error message is used if the device cannot detect a more specific error.

-148   Character data not allowed

A legal character data element was encountered where prohibited by the device.

-144   Character data too long

The character data element contains more than twelve characters (see IEEE 488.2, 7.7.1.4).

-141   Invalid character data

Either the character data element contains an invalid character or the particular element received is not valid for the header.

-140   Character data error

This error, as well as errors -141 through -149, are generated when parsing a character data element. This particular error message is used if the device cannot detect a more specific error.

-138   Suffix not allowed

A suffix was encountered after a numeric element which does not allow suffixes.

-134   Suffix too long

The suffix contained more than twelve characters (see IEEE 488.2, 7.7.3.4).

-131   Invalid suffix

The suffix does not follow the syntax described in IEEE 488.2, 7.7.3.2, or the suffix is inappropriate for this device.

-130   Suffix error

This error, as well as errors -131 through -139, are generated when parsing a suffix. This particular error message is used if the device cannot detect a more specific error.

-128   Numeric data not allowed

A legal numeric data element was received, but the device does not accept one in this position for the header.

-124   Too many digits

The mantissa of a decimal-numeric data element contained more than 255 digits excluding leading zeros (see IEEE 488.2, 7.7.2.4.1).

-123   Exponent too large

The magnitude of an exponent was greater than 32000 (see IEEE 488.2, 7.7.2.4.1).

-121   Invalid character in number

An invalid character for the data type being parsed was encountered. For example, an alpha in a decimal numeric or a "9" in octal data.

-120   Numeric data error

This error, as well as errors -121 through -129, are generated when parsing a data element which appears to be numeric, including non-decimal numeric types. This particular error message is used if the device cannot detect a more specific error.

-114   Header suffix out of range

The value of a header suffix attached to a program mnemonic makes the header invalid.

-113   Undefined header

The header is syntactically correct, but it is undefined for this specific device. For example, *XYZ is not defined for any device.

-112	`Program mnemonic too long`

The header contains more than twelve characters (see IEEE 488.2, 7.6.1.4.1).

-111	`Header separator error`

A character that is not a legal header separator was encountered while parsing the header.

-110	`Command header error`

An error was detected in the header. This message is used when the device cannot detect the more specific errors described for errors -111 through -119.

-109	`Missing parameter`

Fewer parameters were received than required for the header. For example, the `*ESE` common command requires one parameter, so receiving `*ESE` is not allowed.

-108	`Parameter not allowed`

More parameters were received than expected for the header. For example, the `*ESE` common command only accepts one parameter, so receiving `*ESE 0,1` is not allowed.

-105	`GET not allowed`

A Group Execute Trigger was received within a program message (see IEEE 488.2, 7.7). Correct the GPIB controller program so that the `GET` does not occur within a line of GPIB program code.

-104	`Data type error`

The parser recognized a data element that is not allowed. For example, numeric or string data was expected, but block data was encountered.

-103	`Invalid separator`

The parser was expecting a separator and encountered an illegal character. For example, the semicolon was omitted after a program message unit.

-102   Syntax error

An unrecognized command or data type was encountered. For example, a
string was received when the device does not accept strings.

-102   Syntax error; Bad compatibility language character <character>.

In 8656/57 compatibility mode, an illegal language input was received.

-102   Syntax error; Bad compatibility language token <token>.

In 8656/57 compatibility mode, a known command or termination specifier
was received when it was not expected. For example, a termination specifier
was received with no currently active function.

-101   Invalid character

A syntactic command contains a character that is invalid for that type. For
example, a header containing an ampersand, SETUP&. This error might be
used in place of error numbers -114, -121, -141 and some others.

-100   Command error

This is a generic syntax error for devices that cannot detect more specific
errors. The code indicates only that a command error as defined in
IEEE 488.2, 11.5.1.1.4 has occurred.

-100   Command error; LO: No low bandwidth ALC mode allowed.

In 8656/57 compatibility mode, LO was received via GPIB. This command is
not supported by the compatibility mode.

-100   Command error; Remote active function DN/UP not available.

In 8656/57 compatibility mode, either DN or UP was received via GPIB.
These commands are not supported by the compatibility mode.

-100   Command error; Remote active function IS not available.

The instrument only supports the Increment Set (IS) command for
Frequency (FR) and Amplitude (AP) in compatibility mode. All other uses of
IS are invalid.

-100   Command error; R0: No standby mode allowed.

In 8656/57 compatibility mode, R0 was received via GPIB. This command is not supported by the compatibility mode.

-100   Command error; Unable to set new amplitude with UP/DN command.

The instrument is unable to obtain the necessary information to calculate the new amplitude in compatibility mode with the UP/DN command.

-100   Command error; Unable to set new frequency with UP/DN command.

The instrument is unable to obtain the necessary information to calculate the new frequency in compatibility mode with the UP/DN command.

201 to 703: Device-Specific Errors

Some device operations did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

The <error_message> string for a *positive* error is not defined by SCPI. A positive error indicates that the instrument detected an error within the GPIB system, within the instrument's firmware or hardware, during the transfer of block data, or during calibration.

208   I/O Error; <file/device name>

The specified file or device name is invalid.

208   I/O error; Unable to read bit file.

There is an error reading the specified bit file. Try selecting the file again.

208   I/O error; The user file is too large.

The user file selected is too large. Try selecting a smaller file. DCH files must be less than or equal to 4096 bytes. TPC pattern files must be less than or equal to 256 bytes.

209   Invalid argument; <file name>

A file system operation failed because an invalid parameter was specified for the operation. Report this error to Agilent Technologies.

211   Not owner; <file name>

Permission to perform an operation on the specified file has been denied.

211   Not owner; Cannot read <file name>.

Permission to read the specified file has been denied. This may be a temporary condition as the file may have been in use. Try to read the file again. If the problem persists, report this error to Agilent Technologies.

219   Bad file number; <file name>.

An unspecified internal firmware error has occurred.

220   Arg out of domain of func; Cannot read <file name>. All files
                in the waveform directories, volatile or non-volatile, cannot
                be read out at this time.

An attempt has been made to read a waveform file. Waveform files cannot be
read or copied.

220   Arg out of domain of func; <file name>.

An operation failed within the specified file because of an invalid argument.

223   Illegal seek; <file name>.

An illegal seek was performed in a sequential file.

224   Text file busy; <file name>.

The specified file is busy and cannot be accessed.

501   Attenuator hold setting over range; Frequency change forced
                attenuator adjust.

The firmware has changed the attenuator setting because, while in
attenuator hold mode, a change in frequency setting has forced the ALC
beyond its range.

501   Attenuator hold setting over range; Power set to lower limit.

The firmware has changed the power setting to a value other than the
requested value due to the fact that, while in attenuator hold mode, the user
has requested a power setting that is below the ALC range for the
attenuator setting. The power has been set to the lower limit.

501   `Attenuator hold setting over range; Power set to upper limit.`

The firmware has changed the power setting to a value other than the requested value due to the fact that, while in attenuator hold mode, the user has requested a power setting that is above the ALC range for the attenuator setting.

508   `Frac-N Loop unlocked`

The synthesizer is unlocked. Service may be needed.

512   `Reference unlocked`

The instrument's reference is unlocked. If an external reference is connected, check the frequency and power. It is possible for this to occur during a poor connection/disconnection of an external reference. If this error reoccurs when no external reference is connected, the instrument may require service.

513   `1 GHz Oscillator unlocked`

The 1 GHz reference oscillator is unlocked. If an external reference is connected, check the frequency. If this error reoccurs when no external reference is connected, the instrument may require service.

514   `Reference Oven cold`

The reference oven is not at the required operating temperature. This is normal if the instrument has been powered down for a while. If the error persists, the instrument may require service.

515   `Reference board: 10 Mhz reference signal bad or missing`

The instrument's reference is unlocked. If an external reference is connected, check the frequency and power. It is possible for this to occur during a poor connection/disconnection of an external reference. If this error reoccurs when no external reference is connected, the instrument may require service.

516   Baseband Generator unlocked; refer to manual. BBG<NUMBER>

The digital modulation board (baseband generator) is unlocked. If this error occurs and the status indicator on the front panel is not on, the board is operational. There are two reasons for the front panel indicator to be on: External Data mode was selected and no clock was provided for the DATA CLOCK INPUT, or an incorrect setting was selected for the data/symbol clock.

517   Calibration failure; Cal aborted by user.

While executing the internal I/Q calibration, either a DCAS was sent over the GPIB, or the **Abort** key on the front panel was pressed.

517   Calibration failure; DCFM DC overrange

The instrument was unable to perform a DCFM or DCΦM calibration due to the input signal being outside of the offset range that can be calibrated.

517   Calibration failure; I/Q calibration failure.

While executing the internal I/Q calibration, a failure occurred. Please check the hardware.

520   Sampler Loop unlocked

One of the signal generator's samplers is unlocked or one of the sampler circuits are malfunctioning. The instrument may require service.

521   YO Loop unlocked

The Yig oscillator phase lock loop is unlocked. The problem may be due to a bad calibration. If not, then the instrument may require service.

522   Demodulator Unleveled; Input amplitude overrange.

The signal level is too high. Adjust the signal level for the VSA input.

522   Demodulator Unleveled; Input amplitude underrange.

The signal level is too low. Adjust the signal level for the VSA input.

523   Power meter timeout during user flatness calibration

The power meter times out when taking a reading during user flatness calibration. Check GPIB configuration, address, and cable connections.

524   Power meter reading invalid during user flatness calibration

The power meter reading is invalid during user flatness calibration. Check GPIB configuration, address, and cable connections.

525   Cannot set instrument into the GPIB controller mode

At the start of user flatness calibration, the instrument could not be set to the GPIB controller mode. Check GPIB configuration, address, and cable connections.

526   GPIB device could not be assigned

During the initialization of the user flatness calibration, the external power meter could not be assigned to the GPIB address. Check GPIB configuration, address, and cable connections.

527   User Flatness frequency calibration table empty

There were no frequency calibration points entered in the user flatness list table.

535   Proper channels not enabled; DPCH channel one is not enabled.

DPCH channel one must be enabled for channel balancing to occur.

535   Proper channels not enabled; No OCNS channels are enabled.

One or more OCNS channels must be enabled for channel balancing to occur.

600   RPP has tripped

The reverse power protection circuit has been triggered. Repeated tripping of this circuit can cause damage to the instrument.

601	Power search failed

While executing power search, the level meter circuit failed to return a meaningful value. This event indicates that the power is in a range that the leveling loop cannot properly level. The power will be set to the last properly leveled power.

605	DSP FW download failed

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the CPU/Motherboard. Report this error to Agilent Technologies.

605	DSP FW download failed; Opt 300 BERT capability

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the bit error rate tester board for Option 300 capability. Report this error to Agilent Technologies.

605	DSP FW download failed; Opt UN7.

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the bit error rate tester board. Report this error to Agilent Technologies.

606	DSP times out

The digital signal processor (DSP) on the CPU/Motherboard or the bit error rate tester board failed to respond within the appropriate amount of time. Report this error to Agilent Technologies.

606	DSP times out; <file name>.

The digital signal processor (DSP) failed to respond within the allotted amount of time while accessing the specified file. Report this error to Agilent Technologies.

606	DSP times out; BERT flash memory access error.

The flash memory on the BERT board (Option UN7) failed to respond within the appropriate amount of time. If cycling power does not correct the problem, report this error to Agilent Technologies.

606   `DSP times out; Demod flash memory access error.`

The flash memory on the DEMOD board failed to respond within the appropriate amount of time. If cycling power does not correct the problem, report this error to Agilent Technologies.

606   `DSP times out; Demodulator communication failed.`

The digital signal processor (DSP) on the demodulator board failed to respond within the appropriate amount of time. If cycling power does not correct the problem, report this error to Agilent Technologies.

606   `DSP times out; Option 300 EDGE BERT capability.`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option 300 was operating. Report this error to Agilent Technologies.

606   `DSP times out; Option 300 GSM BERT capability.`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option 300 was operating. Report this error to Agilent Technologies.

606   `DSP times out; Option UN7 capability.`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option UN7 was operating. Report this error to Agilent Technologies.

607   `DSP returns error`

The digital signal processor (DSP) is in an undetermined state. Report this error to Agilent Technologies.

607   `DSP returns error; Option 300 EDGE BERT capability.`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option 300 was operating. Report this error to Agilent Technologies.

607   `DSP returns error; Option 300 GSM BERT capability`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option 300 was operating. Report this error to Agilent Technologies.

607   `DSP returns error; Option UN7 capability`

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option UN7 was operating. Report this error to Agilent Technologies

615   `New wave shape changes limit for internal frequency; frequency changed to new limit.`

When using the internal modulation source, the upper limit varies for the different waveforms. If the user changes the waveform when the internal source frequency is higher than that allowed for the new waveform, the frequency for the source will be changed, and the user informed of that change with this message.

617   `Configuration error; Analog modulations subsystem not created.`

The hardware control creation process failed due to a configuration file conflict or a hardware configuration error. Report this error to Agilent Technologies.

617   `Configuration error; Bad board header in fixed board.`

During the system configuration scan of the CPU and mother boards, a board with a bad configuration header was detected. Report this error to Agilent Technologies.

617   `Configuration error; Bad board header in parallel slot.`

During the system configuration scan of parallel bus boards, a board with a bad configuration header was detected. Report this error to Agilent Technologies.

617   Configuration error; Bad board header in serial slot.

During the system configuration scan of serial bus boards, a board with a
bad configuration header was detected. Report this error to
Agilent Technologies.

617   Configuration error; Baseband generator control could not be
               created.

The baseband generator control creation process failed due to a
configuration file conflict or a hardware configuration error. Report this
error to Agilent Technologies.

617   Configuration error; Configuration information file is invalid.
               Please reinstall the file.

The CONFIG_INFO.TXT file was tampered with. This is a signal that the
file was modified, but the internal checks were bypassed.

617   Configuration error; Found improperly configured devices.

An improperly configured device was found during the system configuration
scan. Report this error to Agilent Technologies.

617   Configuration error; IQ modulations subsystem not created.

The hardware control creation process failed due to a configuration file
conflict or a hardware configuration error. Report this error to
Agilent Technologies.

617   Configuration error; License file failed to create.

An error occurred while trying to create or update the license keys. The
flash memory may be full. Remove some files from flash memory and try
again.

617   Configuration error; License file not found. Creating empty
               one.

The license configuration file was missing from flash memory, and a new one
was created. This message will appear if flash memory has been
reformatted. The newly created file will be empty, so all license keys will
need to be reentered.

617   Configuration error; No freq output - bad configuration.

The frequency control subsystem failed to be created due to a hardware configuration problem. Although the user interface appears normal, the instrument is not functional. Report this error to Agilent Technologies.

617   Configuration error; No power output - bad configuration.

The power control subsystem failed to be created due to a hardware configuration problem. Although the user interface appears normal, the instrument is not functional. Report this error to Agilent Technologies.

617   Configuration error; Option <NUMBER> is invalid.

This error is reported when a software option is in the wrong place in the CONFIG_INFO.TXT file. This indicates that the user tried to bypass licensing.

617   Configuration error; Option reconfiguration failed.

The instrument reboots when an option is reconfigured. If reconfiguration fails, it is reported when the instrument completes the reboot. Try repeating the option reconfiguration. Report this error to Agilent Technologies.

618   RS232 times out; RS232 reset.

If further input is not received within the timeout time while a SCPI command is being processed, the command is aborted and the input buffer is cleared.

619   DSP code is invalid; Demodulator board FPGA.

The demodulator's FPGA code is not the revision that the firmware expects.

619   DSP code is invalid; Demodulator main DSP code is invalid.

The demodulator board has an invalid revision of DSP firmware code.

619   DSP code is invalid; BERT DSP code is invalid.

The BERT board has an invalid revision of DSP/FPGA firmware code.

620   `Clock Rate Error; Data clock too fast Option UN7.`

The data clock rate is too high for operation with Option UN7. Reduce the data clock rate and try again.

621   `FPGA download failed`

The FPGA code failed to download. Try again, or contact Agilent Technologies.

622   `Sequence references self; <Sequence Name>.`

The specified sequence is not allowed because it contains a reference to itself.

623   `Out of Lock; Demodulator VCO`

The A/D 26 MHz clock is not correct. The problem may be with the 10 MHz reference, or the 13 MHz GSM clock.

623   `Out of Lock; Downconverter LO.`

There is a problem with the downconverter. The problem may be with the 10 MHz reference or the 13 MHz GSM clock.

624   `Lowband coupler detector fault: Power error below 2 GHz;`

The lowband detector is malfunctioning. The power below 2 GHz could be inaccurate.

625   `Internal pulse generator unlocked`

626   `Internal modulation source unlocked`

627   `Warning: Pulse Width too narrow for ALC`

The pulse width is too narrow for the ALC to perform properly. Try using a signal with a wider pulse or turn off the ALC.

628	Baseband Generator DAC over range; Refer to manual. BBG<NUMBER>

629	File format invalid; Invalid Waveform File selected. The file must have a minimum of 60 samples and the same number of I and Q values. <file name>

The selected ARB waveform file has an invalid format. A valid waveform file must have the same number of I and Q values and must contain a minimum of 60 samples.

629	File format invalid; Sequence contains an invalid waveform.

This is reported when an invalid waveform is found in a sequence file.

630	Arb Sequence Error; Failed to write Arb sequence to sequencer.

This is reported when there is a failure in playing the selected sequence.

630	Arb Sequence Error; Sequence contains too many segments.

This is reported when an ARB sequence contains too many waveform segments. The maximum number of segments that can be added to the sequencer is not affected by the repetition counts of individual segments.

700	State Save Recall Error; Delete empty sequence <sequence_name>. Delete sequence ignored.

You have attempted to delete a sequence that is empty (all registers unused). This message is informational only. Typically this error is reported several times when the "Delete All Sequences" command is executed. If the file is displayed by catalog, delete explicitly.

700	State Save Recall Error; Recall data different from FW revision. No instrument state change.

An attempt was made to recall a state that was saved with an incompatible version of the instrument firmware. This typically occurs when a state file is copied from an instrument with a newer version of firmware to an instrument with an older version of firmware. Newer versions of instrument firmware can read older state files.

700	`State Save Recall Error; Recall non-saved state register.` `Recall ignored.`

A recall was attempted for a state register that is unused. If state file exists, delete explicitly using catalog.

700	`State Save Recall Error; Recalled state has a bad checksum. No` `instrument state change.`

The state file was corrupt or out-of-date, so the recall was ignored. If state file exists, delete explicitly using the memory catalog.

700	`State Save Recall Error; Unable to read the secondary frame` `instrument state file. The secondary frame has been turned off.`

The format that is currently active needed the secondary frame instrument state file to generate the secondary frame in pattern RAM, but the instrument state file was either not previously saved or it was deleted. You must create and save a secondary frame instrument state.

702	`Load/Store Error; Cannot create a filter with no coefficients.`

A filter must have at least one coefficient specified.

702	`Load/Store Error; Cannot create a Modulation with less than one` `bit per symbol.`

A modulation must have at least two states specified.

702	`Load/Store Error; Cannot create a shape with less than 2` `points.`

Burst shape files must have two or more points for both the rise and the fall shape specification.

702	`Load/Store Error; Invalid modulation file.`

The user modulation file is invalid. The file is either corrupt or is not a modulation file.

702	`Load/Store Error; Unrecognized FIR file version.`

The file is either corrupt or is not a FIR file.

702   Load/Store Error; Unrecognized modulation file version.

The user modulation file has an unrecognized version. The file is either corrupt or is not a modulation file.

702   Load/Store Error; Unrecognized shape file version.

The burst shape file is corrupted, or is not in the proper format.

703   Feature not supported; RS232 flow control is not supported.

Command is not supported for RS-232.