

Using the new Relative Offset function

The Rel Offset menu is now available on the Keithley Instruments Model 3500 Portable RF PowerMeter®. The Relative Offset allows users to apply an offset value to the measurement.

Relative Offset values range from -99.99dB to +99.99dB with 0.01dB resolution. When Relative Offset is on, the displayed power is limited to +/- 99.99dBm and 999.99W.

Turning on the Relative Offset and adding a value

When Rel Offset is enabled, a flashing letter "O" is displayed in the right corner of the PowerMeter.

To turn on the Relative Offset:

1. Power on the PowerMeter.
2. Press the **MENU** key to enter menu mode.
3. Scroll to the Rel Offset menu on the display.
4. Press the **right arrow** key and select the **ON** function from the submenu. Enter a Relative Offset value using the steps below.
5. Press the **MENU** key to exit.

NOTE Powering the PowerMeter on or off erases any Relative Offset values entered.

To enter a Relative Offset value:

1. From the Rel Offset submenu, press the **right arrow** key and select **EDIT**. Notice that the **up**, **down**, **left**, and **right arrow** keys are enabled.
2. Use any of the **up**, **down**, **left**, or **right arrow** keys to edit the individual digits of the Relative Offset value and store them.
3. Select the **up** and **down arrow** keys to change the sign of the Relative Offset positive (+) or negative (-) value.
4. Press the **MENU** key to exit and store the Relative Offset value entered. The Rel Offset value entered is applied to the measurement reading on the PowerMeter.

When the ON submenu is chosen and a Relative Offset value is entered, the Relative Offset function is enabled and an "O" is flashing in the right corner of the display. When the Relative Offset value entered is 0.0, the "@" character is flashing in the right corner of the display, indicating there is no Relative Offset.

NOTE Powering the PowerMeter on or off erases any Relative Offset values entered.

Turning off the Relative Offset

To turn off the Relative Offset without erasing the Relative Offset value entered:

1. Press the **MENU** key to enter menu mode and display the Rel Offset submenu.
2. Press the **right arrow** key and select the **OFF** function from the submenu.
3. Press the **MENU** key to exit. The "@" character will flash in the right corner of the display, indicating there is no Relative Offset.

NOTE *Powering the PowerMeter on or off erases any Relative Offset values entered.*

Additional remote USB commands

The following remote USB commands have been added:

Set Relative Offset

Description

This command sets a Relative Offset value.

Syntax

```
SETREL<Value><LF>
```

Check for the Relative Offset value

Description

This command checks for and returns the set Relative Offset value.

Syntax

```
RELVAL?<LF>
```

Turn Relative Offset on

Description

This command sets the Relative Offset to ON.

Syntax

```
RELON<LF>
```

Turn Relative Offset off

Description

This command sets the Relative Offset to OFF.

Syntax

```
RELOFF<LF>
```

Check status of the Relative Offset

Description

This command checks the status of the Relative Offset. If it is ON, a "1" is returned, and if it is OFF, a "0" is returned. If it is in EDIT mode, a "2" is returned.

Syntax

REL?<LF>

Retrieve Firmware Revision

Description

This command returns the Firmware Revision.

Syntax

FWREV?<LF>