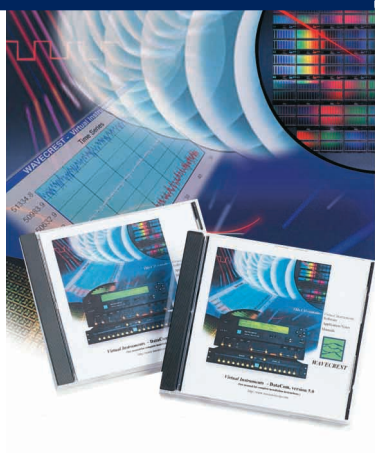
PRODUCT DATA SHEET

WAVECREST Fibre Channel/Gigabit Ethernet Communications Test Set



The Fibre Channel/Gigabit Ethernet Communications Test Set was developed for the special requirements of design and test engineers designing and producing high-speed communications devices, boards and systems. The combination of ***WAVECREST's*** Virtual Instruments™ Signal Integrity (VISI) 5.1 release and the introduction of the 3.125 Gbps DTS-2079™ represents a breakthrough in timing and jitter analysis solutions for the communications market.

In the past, predicting the long-term reliability of a communications system was time-consuming, expensive and notoriously inaccurate, even with Protocol Analyzers and BERT testers. Now, in less time than it takes to read this sentence, you can analyze a serial data stream for spec compliance, measuring not only total jitter (TJ), but also deterministic jitter (DJ) and random jitter (RJ). Best of all, these measurements may be conducted with or without markers, making the ***WAVECREST*** Fibre Channel/Gigabit Ethernet Communications Test Set the most versatile and powerful signal integrity analysis solution available today.

FC/GBE Communications Test Set Components

- DTS-2079™ Communication Signal Analyzer
- VISI™ 5.1 dataCOM Software
- System Controller
- Differential Balun

Limited Time Introductory Pricing

DTS-2079™

This Breakthrough System is the First to Achieve 3.125 Gbps

VISI™ 5.1 Features:

• **"Markerless" Measurements** Run TJ, RJ and DJ ANSI specification compliance analysis, with or without clocks or markers.

• **BERT Correlation** The Fibre Channel/Gigabit Ethernet Communications Test Set is a BERT equivalent tester. The Test Set delivers valuable diagnostic data for design and characterization not available from a traditional BERT analyzer. Furthermore, it does so in a fraction of the time.

• **DataCOM Analysis, No Waiting** The NEW VISI™ 5.1 software boasts a 3X improvement in calculation speed from previous versions.

• **Expanded Peripheral Functionality** Integrate the ***WAVECREST*** DSM™ series of Input Relay Matrices for increased functionality and analysis range. You can learn more about our DSM products at www.wavecrestcorp.com.

WAVECREST Corporation
A Technologies Company

1-800-733-7128
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Signal Integrity

DTS-2079™ Performance Specification

Product Specifications:

Timing Characteristics:	
Frequency Range	0.4Hz to 1.63GHz
Maximum Data Rate	3.2 Gbps
Minimum Pulse Width	300ps
Jitter Noise Floor	3ps (2ps typical)[1]
Jitter Measurement Accuracy	<2ps[2]
Hardware Resolution	680fs
Time Measurement Range	±2.5s
Frequency Measurement Accuracy	1PPM
Time base Accuracy	1PPM
Time base Stability (Short term Aging)	$5x10^{-11}$
Voltage Performance:	
Input Range	±1.1V(50Ω load)
V_{REF} Accuracy	±(1.5 mV+0.75% of setting)
V_{REF} Resolution	150µV

Features:

External Arming - Used for synchronizing a timing measurement to an external pattern generator for examining timing issues at a particular point in time. Supports edge triggered arming and gated arming (window arming).

Automatic Arming - Used for serial data streams and clock signals that repeat indefinitely. This feature is critical in enabling clock-less data signal analysis.

Internal Sampling Oscilloscope - Used for identifying signal characteristics that are present at the channel input. The oscilloscope has an effective sampling rate of 100GHz.

User Programmable Subroutine Memory - Used for developing production and characterization scripts to enhance through-put and measurement time.

Built-In Internal Calibration - Used for self-calibration of internal hardware. External reference ports accessible on back panel for accuracy verification.

Built-In External Calibration - Used for timing and voltage deskew of cables, probes and other interconnect hardware.

[1] Jitter Noise Floor is the minimum Jitter measurement that can be made. This measurement is an accumulation of several jitter frequency components and their effect on the measurement in question. The Jitter Noise Floor measured in the Frequency domain is less than 1ps.
[2] Jitter Measurement Accuracy is a function of the hardware's measurement repeatability.

WAVECREST has the technology and the tools you need to run thorough analysis of your serial communications devices. For more information on our Fibre Channel/Gigabit Ethernet Communications Test Set or any of our signal integrity analysis solutions, please call 1 (800) 733-7128 or go to www.wavecrestcorp.com.