

80C11 Optical Measurement Module

The long-wavelength 80C11 optical sampling module is a hardware plug-in for the Tektronix 8000 Series Communications Signal Analyzer family. The module offers the bandwidth and accuracy to meet the design and characterization measurement needs of 10 Gb/s datacom components and equipment that use externally modulated lasers devices. It can also handle measurements on 10 Gb/s SONET/SDN telecom devices.

The 80C11 (and its companion, the 80C08C) are the first available solutions to answer 10 GbE forward error correction (FEC) measurement needs. In addition, both products offer user defined continuous clock recovery rates—another industry first.

80C11 Feature	Characteristic
Supported standard or filtering rates	<ul style="list-style-type: none"> • OC-192/STM-64 (9.953 Gb/s) • 10GBASE-W (9.953 Gb/s) • 10GBASE-R (10.31 Gb/s) • 10G Fibre Channel (10.52 Gb/s) • ITU-T G.975 FEC (10.664 Gb/s) • ITU-T G.709 (10.709 Gb/s) • 10 GbE FEC (11.1 Gb/s)
Effective wavelength range	1100 nm to 1650 nm
Calibrated wavelengths	1310 nm and 1550 nm (± 20 nm)
Clock recovery (4 optional configurations)	<ul style="list-style-type: none"> • Fixed rate, 9.953 Gb/s • Fixed rate, 9.953 Gb/s, 10.664 Gb/s • Fixed rate, 9.953 Gb/s, 10.709 Gb/s • Continuously adjustable, 9.8 Gb/s to 12.6 Gb/s
Unfiltered optical bandwidth	30 GHz typical Note that PR claims 30 GHz
Fiber input	Single-mode
RMS optical noise (typical)	<ul style="list-style-type: none"> • 5.5 μW at all filtering rates (typical) • 10.0 μW at 20 GHz • 20.0 μW at 30 GHz
Power Meter Range	+4 dBm to -30 dBm
Power Meter Accuracy	5% of reading
Mask test optical sensitivity	<ul style="list-style-type: none"> • -10 dBm at all filtering rates • -7 dBm at 20 GHz • -4 dBm at 30 GHz