



DC *point2point*

point2point DC-coupled fibre optic link

- 2.5 MHz, 20 MHz and 40 MHz upper 3 dB points
- 14 bit ADC/DAC
- Optional remote control over separate link
- Allows transmission of true DC signals over 10 km

Key military test standards

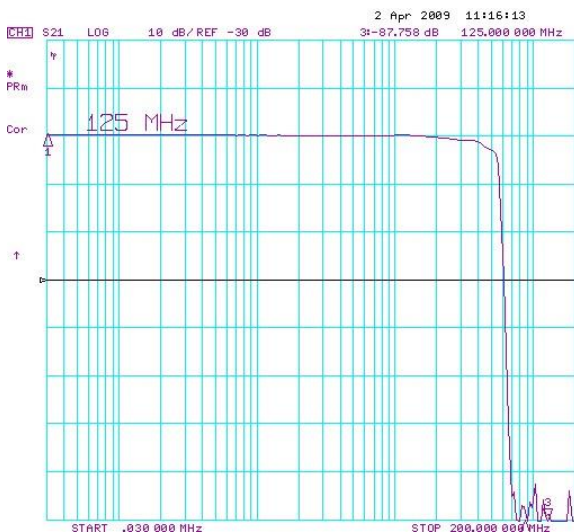
The DC *point2point* link supports standards testing for EMC, EMP, HIRF, NEMP etc., including key standards such as:

- MIL-STD-188-125
- MIL-STD-461G
- DEF STAN 59-188
- DEF STAN 59-411.

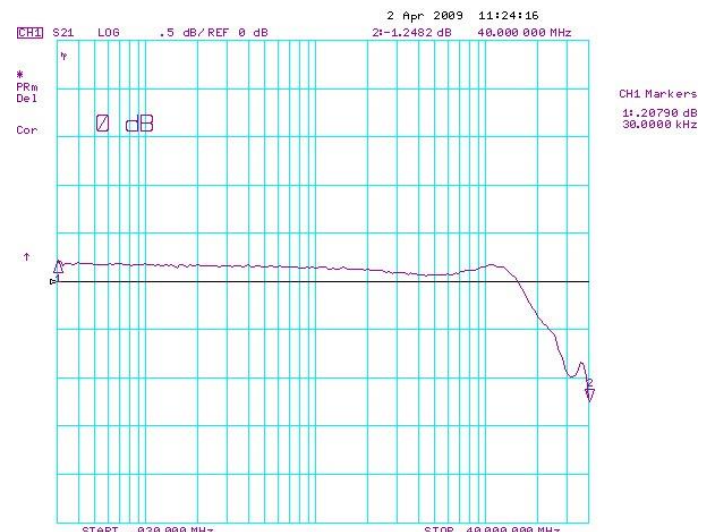
The DC *point2point* link transmits analogue signals of up to 40 MHz over single mode fibre. Equivalent to rise times of 10.3 ns are ideal for measuring transients on HVDC transmission lines. The modules are available in a fully EM shielded casing or as a plug-in module for use with *point2point* housings.

Battery power units can be controlled using the *point2point* battery switch and controller to optimise the operational lifetime.

- Input voltage ranges from +/-2 V to +/-150 V
- 2.5 MHz units have a +/-10 V output option



Freq. response for DC to 40 MHz links (10 dB/div)



Phase response for DC to 40 MHz links (10 deg/div)

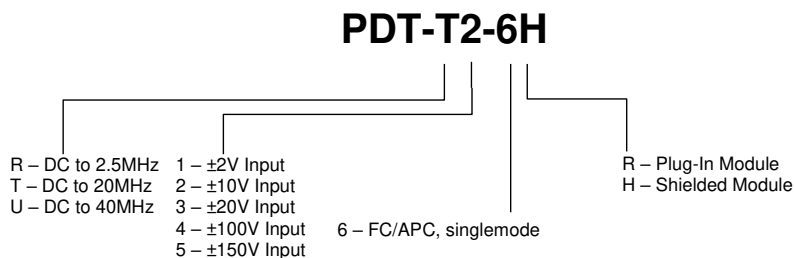
Due to our policy of continuing product development, these specifications are subject to change and improvement without notice.

SPECIFICATIONS

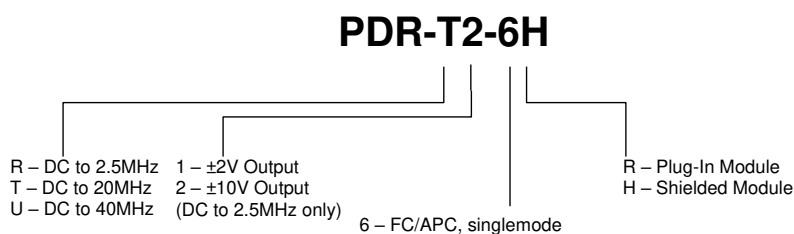
DC Coupled Links		2.5 MHz	20 MHz	40 MHz
Passband		0 Hz to 2.5 MHz	0 Hz to 20 MHz	0 Hz to 40 MHz
Gain Flatness	Typical Maximum	± 0.5 dB to 1 MHz ± 1 dB to 2 MHz ± 3 dB to 2.5 MHz	± 0.25 dB to 2 MHz ± 1 dB to 15 MHz ± 3 dB to 20 MHz	± 0.25 dB to 10 MHz ± 1 dB to 30 MHz ± 3 dB to 40 MHz
Phase flatness		$< \pm 10^\circ$		
Rise time		< 135 ns	< 20.5 ns	< 10.3 ns
Output Noise (Full band, all values are V_{rms}) For +/- 2 V output For +/- 10 V output		0.3 mV (0.02% FS) 1.5 mV (0.02% FS)	0.8 mV (0.06% FS) N/A	0.7 mV (0.05% FS) N/A
Signal latency (1 m fibre)		350 ns	280 ns	210 ns
Transmitter input impedance		1 M Ω / 25 pF typ.		
Receiver output impedance		50 Ω @ 2 V standard 300 Ω @ +/- 10 V optional (2.5 Hz limited)		
Output DC offset (worst case)		0.3% of FSD		
Non-linearity		0.1% of FSD		0.06% of FSD
Operating temperature (NOTE: Specifications quoted at 25 $^\circ$)		-20 to $+60$ $^\circ$ C		
Optical path length (single mode)		< 1 m to 10 km		
Electrical Connectors		BNC 50 Ω		
Optical Connectors		Single mode FC/APC		
Current Consumption @ 12 V	Tx Rx	< 240 mA < 350 mA	< 240 mA < 315 mA	< 210 mA < 280 mA
Front Panel Indication Transmitter Module Receiver Module		Power supply status & ADC overflow Power supply status & link lock status		

PART NUMBERS AND OPTIONS

Transmitter



Receiver



*N.B. For information on dimensions, see the “casings and housing” section of the **point2point** accessories datasheet.*