

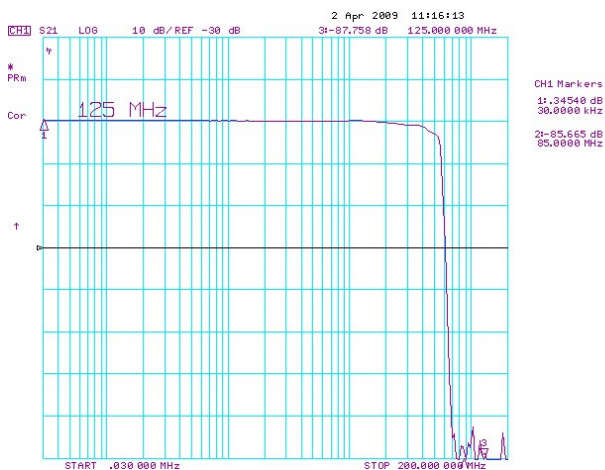
point2point DC-coupled fibre optic link

- 2.5MHz, 20MHz and 40MHz upper 3dB points
- 14 bit ADC/DAC
- Optional remote control over separate link
- Allows transmission of true DC signals over 10km, 1MV or in 100kV/M

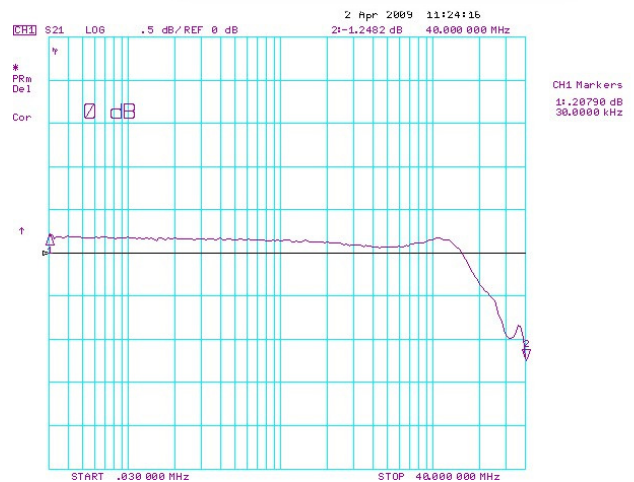
The DC point2point link transmits analogue signals of up to 40MHz over single mode fibre. Equivalent to rise times of 10.3ns are ideal for measuring transients on HVDC transmission lines. The modules are available in a fully EM shielded casing, or as a plug-in module for use with point2point housings.

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

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



Freq. response for 10MHz to 3GHz links (10dB/div)



Phase response for 10MHz to 3GHz links. (10 deg/div)

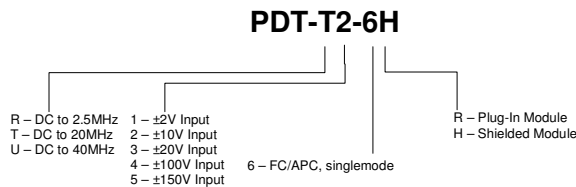


SPECIFICATION

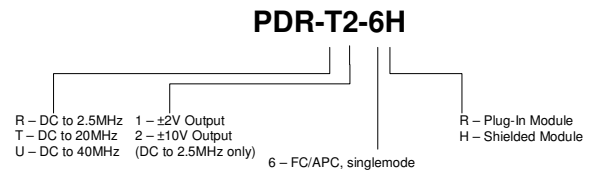
DC Coupled Links		2.5MHz	20MHz	40MHz
Passband		0Hz to 2.5MHz	0Hz to 20MHz	0Hz to 40MHz
Gain Flatness	Typical	±0.5dB to 1MHz	±0.25dB to 2MHz	±0.25dB to 10MHz
	Maximum	±1dB to 2MHz ±3dB to 2.5MHz	±1dB to 15MHz ±3dB to 20MHz	±1dB to 30MHz ±3dB to 40MHz
Phase flatness		> ±10°		
Rise time		<135ns	<20.5ns	<10.3ns
Output Noise (Full band, all values are V _{rms}) For +/- 2V output For +/- 10V output		0.3mV (0.02% FS) 1.5mV (0.02% FS)	0.8mV (0.06% FS) N/A	0.7mV (0.05% FS) N/A
Signal latency (1M fibre)		350ns	280ns	210ns
Transmitter input impedance		1MΩ / 25pF typ.		
Receiver output impedance		50Ω @2V standard 300Ω @ +/- 10V optional (2.5Hz 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°)		-20 to +60°C		
Optical path length (single mode)		<1m to 10km		
Electrical Connectors		BNC 50Ω		
Optical Connectors		Single mode FC/APC		
Current Consumption @ 12V Tx Rx		<240mA <350mA	<240mA <315mA	<210mA <280mA
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