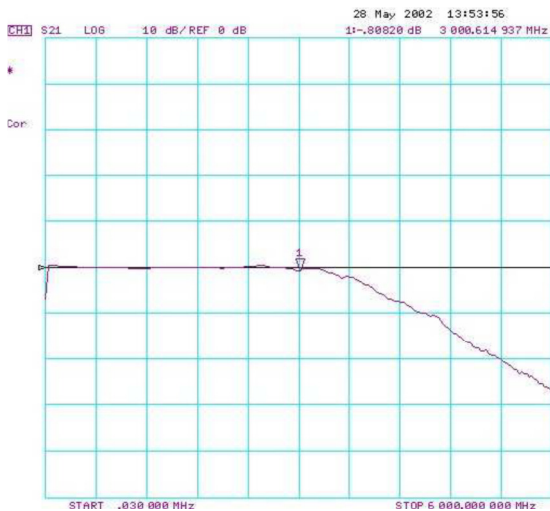


## ***point2point AC-coupled fibre optic link***

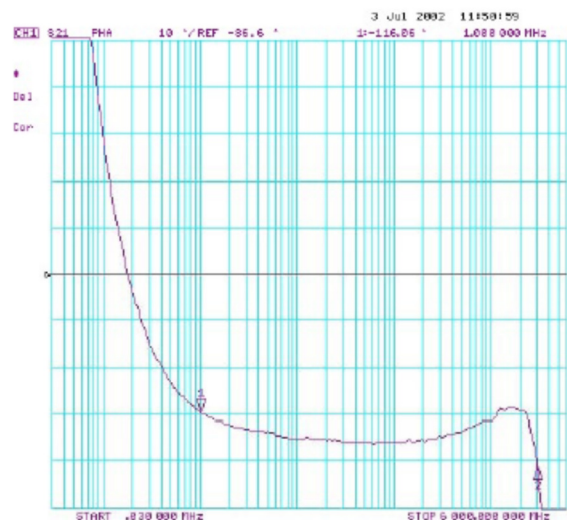
- **250MHz, 1.35GHz, 2GHz and 3GHz upper 3dB points**
- **Allows transmission of signals over 5km, 1MV or in 100kV/M**
- **Very low noise figure and high dynamic range**
- **Minimum detectable signal at output -155dBm/Hz**

The AC ***point2point*** link is capable of transmitting any type of low level RF/analogue signals of up to 3GHz over single mode fibre. Ideal for EMC measurements, HPM experiments or distributed timing, the modules are available in a fully EM-shielded casings, or as a plug-in module for use with the various ***point2point*** housings.

When used in combination with the PPM battery switch and controller it is possible to control the on/off status of battery powered modules to manage the operational lifetime.



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



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



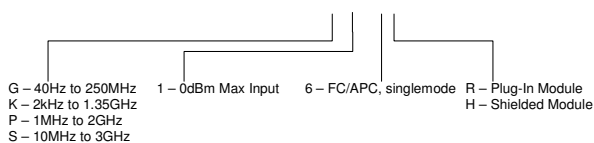
## SPECIFICATION

AC Coupled Links	G series	K series	P series	S series
Passband	40Hz to 250MHz	2kHz to 1.35GHz	1MHz to 2GHz	10MHz to 3GHz
Gain Flatness Typical Maximum	±0.5dB (100Hz-250MHz) ±3dB	±0.5dB (10kHz-1.35GHz) ±3dB	±0.5dB ±1.5dB	±0.75dB ±1.5dB
Phase flatness	> 100Hz : ±20°	> 5kHz : ±20°	±20° (typ. ±5° for 1MHz to 1.5GHz)	±20°(typ. ±5° for 1MHz to 1.5GHz)
Rise time	<1.4nS	<350pS	<250pS	<200pS
Noise Figure (typical)	< 24dB (22dB) @ 100MHz	< 25dB (22dB) @ 500MHz	<25dB (24dB) @ 500MHz < 30dB @ 2GHz	< 26dB (24dB) @ 500MHz < 30dB @ 3GHz
Signal latency (1M fibre)	10nS			
Transmitter input impedance (VSWR)	50Ω (<1.5:1)			
Receiver output impedance (VSWR)	50Ω (<1.5:1)			
Input P1dB	>0dBm @ 100MHz	>0dBm @ 500MHz	>0dBm @ 500MHz	>0dBm @ 500MHz
Input IP3	>10dBm @ 100MHz	>10dBm @ 500MHz	>10dBm @ 500MHz	>10dBm @ 500MHz
Signal inversion	inverting			
Operating temperature (NOTE: Specifications quoted at 25°)	-10 to +40°C			
Optical path length	<1m to ~4km			
Optical budget	-3dB will turn status LED red/green on RX module -10dB will turn status LED red on RX module			
Electrical Connectors	SMA Female 50Ω			
Optical Connectors	Singlemode: FC/APC Narrow Key			
Current Consumption @ 12V	<250mA for Transmitter Module, <150mA for Receiver Module			
Front Panel Indication Transmitter Module Receiver Module	Power supply status & transmitter active Power supply status & received light level			

## PART NUMBERS AND OPTIONS

### Transmitter

#### PAT-G1-6R



### Receiver

#### PAR-G1-6R

