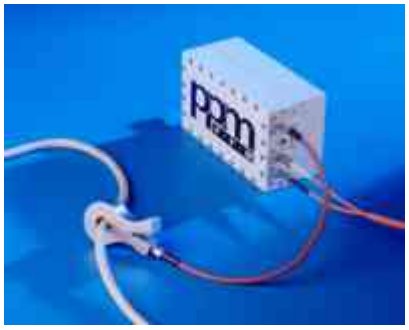
AC Fibre Optic Link

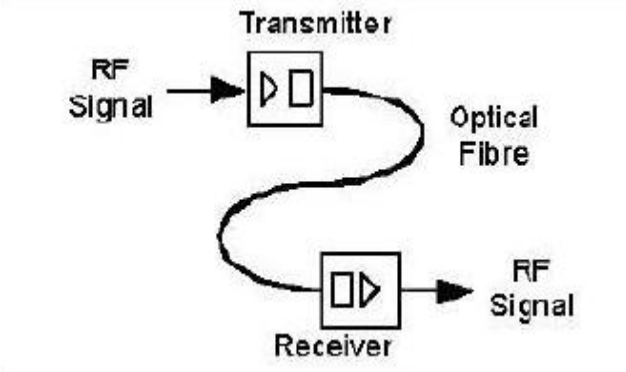


Our ***point2point*** AC Analogue Fibre-Optic-Links provide a high performance analogue data transmission system, which offers great benefits to users who require a solution to electrical interference and signal attenuation problems in signal monitoring and distribution.

OPERATION:

The user applies an electrical signal to the input of the Transmitter. The signal is amplified and conditioned, and converted into an optical signal for transmission over the optical fibre. At the Receiver, the signal is converted back into an electrical signal.

Due to the analogue nature of this technique, the link may be used to convey data of almost any format within the specified frequency limits.



APPLICATIONS

- Antenna Remoting.
- IF Links.
- Secure Transmission (Tempest).
- Pulse power measurements.
- Time and frequency domain monitoring.
- Signals containing a wide range of frequency components.

BENEFITS

The use of optical fibre has a number of inherent advantages over conventional copper based alternatives:

- Immunity to electrical interference, so the signal is not corrupted by radiated interference.
- It is low loss, enabling very long path lengths with negligible degradation of signal-to-noise.length.
- It is non-conductive, thus providing an intrinsically safe transmission path for the monitoring of equipment at hazardous voltages.
- It uses highly flexible and small diameter cable.

HIGH PERFORMANCE

Our Fibre Optic Link offers particular advantages:

- Wide, flat frequency response for accurate transmission of broadband signals e.g. squarewaves, double exponential pulses etc.
- Electrically screened Shielded Remote Module option for operation in high levels of electrical interference.
- A range of input and output signal levels.
- Wide dynamic range to permit simultaneous monitoring of low and high level signals.
- Visual indication of received optical signal level at Receiver.

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AC Fibre Optic Link

SYSTEM CONFIGURATION

The AC Analogue Fibre-Optic-Links belong to our modular point2point product range, where the Transmitter or Receiver units can be delivered in Remote, Shielded Remote or Plug-In Module options. A typical system configuration comprises a Shielded Remote Transmitter Module connected to a Plug-In Receiver Module via a Fibre Optic Cable.

USER SPECIFIED PARAMETERS

The user can specify a number of link parameters to suit any particular application including: signal level; bandwidth, gain, and also a range of mechanical options including ruggedised optical connectors and high strength cable.
An option is provided for a bi-directional RS232 link along a second fibre. This provides a compact solution for transmission of the user's command or control information.

The following are the different types of **AC Analogue Fibre-Optic-Links** :

- **AC Analogue 2KHz-1.35GHz Fibre-Optic-Link**
- **AC Analogue 40Hz-250MHz Fibre-Optic-Link**
- **AC Analogue 1MHz-2GHz Fibre-Optic-Link**
- **AC Analogue 10MHz-3GHz Fibre-Optic-Link**
- **AC Link Gain Calculation**