

KI5000 Series

Optical Power Leveler

Optical Communications Application

- Power monitoring
- Power attenuation
- Auto power regulation



Revision: 2

A combined power meter and variable optical attenuator to provide automatic power levelling in a fiber transmission line.

Fitted to a 35 mm DIN rail, and provided with a 12 - 48V power supply, this is an easy, reliable, and unique solution to transmission problems caused by varying receiver power levels.

No telemetry link is required.

Features and benefits

- High reliability
- Fast system response time
- Low overall cost
- Generally low excess optical loss
- Only external connections are fiber & DC power
- No external control or data link is required
- Set power level is adjusted manually for each site
- Auto default to pass-through mode in case of internal fault/power failure
- Indicators to show if device condition is normal/outside of range/faulty
- Mounted on its own, or on a 35mm DIN rail

SPECIFICATIONS

Parameter	Value
Technology	Attenuator, power monitor & set-point control
Output power set-point	-7 ~ -17 dBm (user adjustable)
Output power stability	± 0.3 dB (@ 1310 nm for KI5010) / (@ 1550 nm for KI5011)
Output power setting resolution	0.5 dB
Attenuation range	2 to 30 dB
Operating wavelength	1270~1330 nm (KI5010) / 1490~1610 nm (KI5011)
Response time	< 1 sec
Connector type	LC-PC or LC-APC Duplex (one fiber in, one fiber out).
Input/output power handling	Single or bidirectional
Fiber type	9.5/125 μm SMF (typical)
ORL	Limited by LC/PC connectors
PDL	0.2 dB
Max continuous power	10 dBm
Operating temperature	-40 ~ 65 °C
Relative humidity	95% (non-condensing)
Housing	Internally mounted 35 mm DIN rail
MTBF	>100 Years @25 °C (theoretical)
Power supply	12~48 Volt DC (on electrical power loss: pass-through mode)
User controls	2 up/down buttons, status indication, simple numeric display, USB for maintenance
Size	115 (D) x 98(H) x 22(W) mm

ORDERING INFORMATION

Description	Part number
Instrument, Optical Power Leveler, 1270~1330 nm	KI5010
Instrument, Optical Power Leveler, 1270~1330 nm, APC	KI5010-APC
Instrument, Optical Power Leveler, 1490~1610 nm	KI5011
Instrument, Optical Power Leveler, 1490~1610 nm, APC	KI5011-APC

STANDARD ACCESSORIES

Description	Quantity
User manual	1
QA certificate	1