OPTICAL SWITCH WITH WDM



Why Utel?

For over three decades, UTEL has provided highly innovative test solutions to the global telecoms market. Based in the UK, we have expanded to serve international customers in partnership with some of the sector's leading operators.

We established our reputation in the days of copper networks, providing advanced centralised network test heads, switches and controllers servicing over 20 million lines for Europe's biggest telecoms operators. We now focus on developing products and services to support increasingly sophisticated full fibre networks.

Our fibre product portfolio includes UTEST – an innovative, centralised testing system developed to support ambitious, forward-looking operators keen to build right first time and provide high levels of customer service in the increasingly competitive FTTX market.

UTEL's optical switches with integral WDM (Test Access Filter) are part of the UTEST system.



Applications

Utel's range of optical switches with integral WDM are optimized for limited space installations, such as FTTX street cabinets. They are also suitable for central office applications and remote exchanges. The switches are used in conjunction with the UTEL 903 OTDR, ROSC and FastLight software as part of the UTEST centralised testing system.

UTEL optical switches with WDM are ideal for testing passive optical networks (PONs) with up to 64 OLT ports. The combined unit minimizes the amount of rack space required, simplifies installation and reduces the cabling required at the testhead. The UTEL 903 OTDR coupled with the combined switch is ideal for testing small PONS where later expansion is not required, such as in rural communities where further housing development is unlikely.

Key features

- Suitable for FTTX street cabinet and central office applications
- High port density, small form factor (1U or 1½U)
- Available with 8, 16, 32 or 64 switch ports
- >100 million switching operations
- · Controlled via the UTEL 903 centralised OTDR or ROSC
- Powered via UTEL 903 OTDR or ROSC with low power consumption
- 19" or 21" rack mount

OPTICAL SWITCH WITH WDM



Technical specification	
Number of switch ports	8, 16, 32, 64
Optical input port type	Simplex LC/APC
Optical output port	LC/APC
Lifetime (switch cycles)	>100 million
Switching time	10ms to adjacent channel
Repeatability	≤±0.02dB
Wavelength	OTDR band 1640-1670nm OLT band 1260-1625nm
Insertion Loss	Service path OLT – network <0.6dB (inc. connectors)
Isolation Loss	OTDR – network ≥13dB OLT – network ≥40dB
PDL	<0.1dB
Directivity	≥50dB
Return loss	≥50dB
Channel crosstalk	≥55dB
Control interface	UTEL proprietary via OTDR or ROSC
Power supply	12VDC from OTDR or ROSC
Power consumption	<1W idle, <2W active
Temperature range	Operating: -25°C to +55°C
Installation	19" or 21"
Dimensions	8, 16, 32: Width: 19" Height: 1U Depth: 275mm 64: Width: 19" Height: 1½U Depth: 275mm
Weight	3.5kg

Related products

UTEL Optical switches with integral WDM are part of the UTEST centralised FTTX testing system. They are typically used with the UTEST 903 OTDR, UTEST management software, and UTEL ROSC.

If you would like to know more about UTEST and how our optical switches with integral WDM can help you to optimise your network's reliability and performance, please contact us by emailing info@utel.co.uk or call +44 (0) 1473 828909.









