40 & 48-Channel DWDM Passive Filter

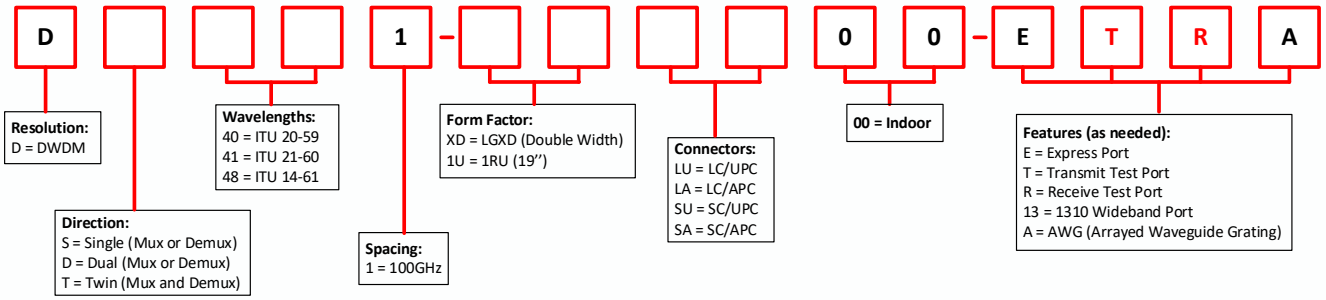
ISP (Indoor Use), AWG Versions

Product Description:

40 & 48-Channel ISP DWDM Arrayed-Waveguide Grating Filter with the following options:

- Express/Test Ports
- Single/Dual/Twin LGX Form Factor
- UPC/APC Connectors

Product Ordering Information



Part Number / Description Examples

Part Number	Single Description
DS401-XDLA00-ETRA	DWDM, Single (Mux or Demux), ITU 20-59, 100GHz grid, LGX double width, LC-APC, with Express + Transmit Test + Receive Test ports, AWG
DS401-XDLU00-ETRA	DWDM, Single (Mux or Demux), ITU 20-59, 100GHz grid, LGX double width, LC-UPC, with Express + Transmit Test + Receive Test ports, AWG
DS401-1ULU00-ETRA	DWDM, Single (Mux or Demux), ITU 20-59, 100GHz grid, 1RU 19" wide (include brackets), LC-UPC, with Express + Transmit Test + Receive Test ports, AWG
DS481-1ULA00-ETRA	DWDM, Single (Mux or Demux), ITU 14-61, 100GHz grid, 1RU 19" wide (include brackets), LC-APC, with Express + Transmit Test + Receive Test ports, AWG

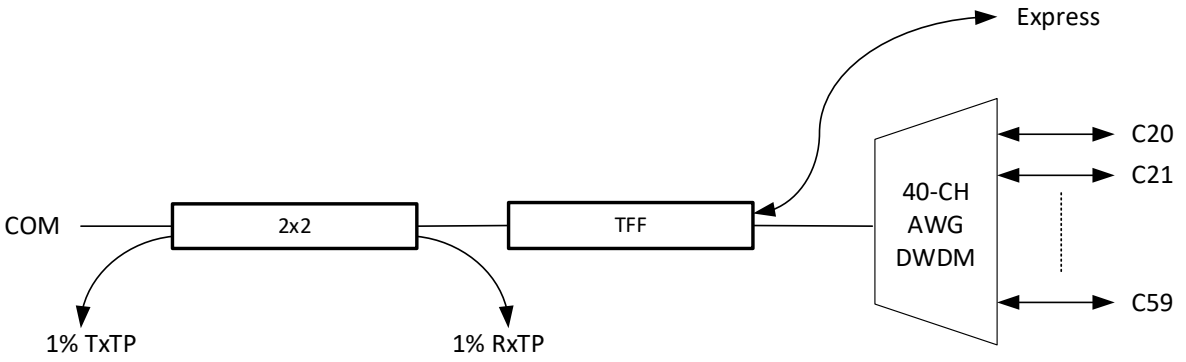
Part Number	Dual Description
DD401-1ULU00-ETRA	DWDM, Dual (Mux or Demux), ITU 20-59, 100GHz grid, 1RU 19" wide (include brackets), LC-UPC, with Express + Transmit Test + Receive Test ports, AWG
DD401-1ULA00-ETRA	DWDM, Dual (Mux or Demux), ITU 20-59, 100GHz grid, 1RU 19" wide (include brackets), LC-APC, with Express + Transmit Test + Receive Test ports, AWG

Part Number	Twin Description
DT401-1ULU00-ETRA	DWDM, Twin (Mux + Demux), ITU 20-59, 100GHz grid, 1RU 19" wide (include brackets), LC-UPC, with Express + Transmit Test + Receive Test ports, AWG
DT411-1ULU00-ETRA	DWDM, Twin (Mux + Demux), ITU 21-60, 100GHz grid, 1RU 19" wide (include brackets), LC-UPC, with Express + Transmit Test + Receive Test ports, AWG

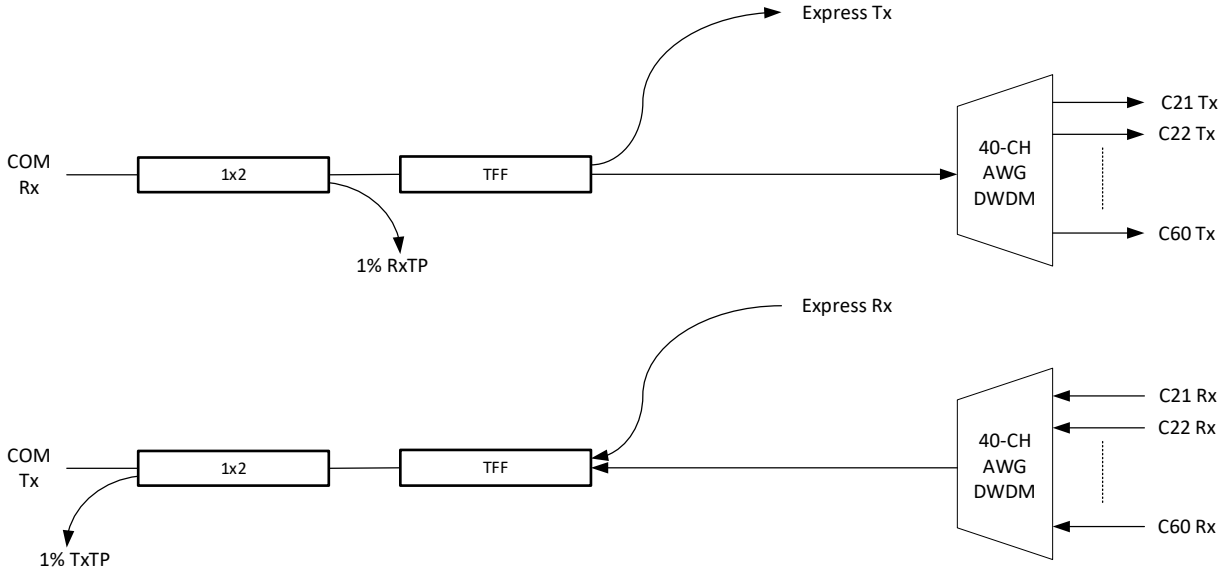
Optical Characteristics

Parameter	Value	Unit
DWDM Passband @ -0.5dB	$\lambda_c \pm 0.11$	nm
DWDM passband insertion loss @ -0.5dB	<6.0	dB
DWDM passband ripple @ -0.5dB	< 0.5	dB
Test port insertion loss (dB)	20 ± 2	dB
Express insertion loss	< 1.5	dB
Express passband ripple	< 0.5	dB
Express passband	1260-1520 (1420-1520 w/ 1310 Port) 1570-1635	nm
1310 port insertion loss	< 1.5	dB
1310 port passband ripple	< 0.5	dB
1310 port passband	~1260-1360	dB
DWDM uniformity	< 2.0	dB
Isolation Adj (COM-DWDM)	> 25	dB
Isolation Non-Adj (COM-DWDM)	> 30	dB
Isolation Non-Adj (COM-EXP)	> 12	dB
DWDM directivity	> 50	dB
EXPRESS directivity	> 45	dB
Return loss	> 40	dB
Polarization dependent loss	< 0.5	dB
Polarization mode dispersion	< 0.5	ps
IL thermal stability	< 0.005	dB/°C
Wavelength thermal stability	< 0.001	nm/°C
Maximum input power	250 / 24	mW/dBm
Operating Temperature:	-5 to 65	°C
Operating humidity	5 to 95	%
Tensile strength pull strength (up to 10 seconds max)	> 20^3	N
Fiber type (all ports)	SMF-28e (G.657.A1)	

Filter Optical Design

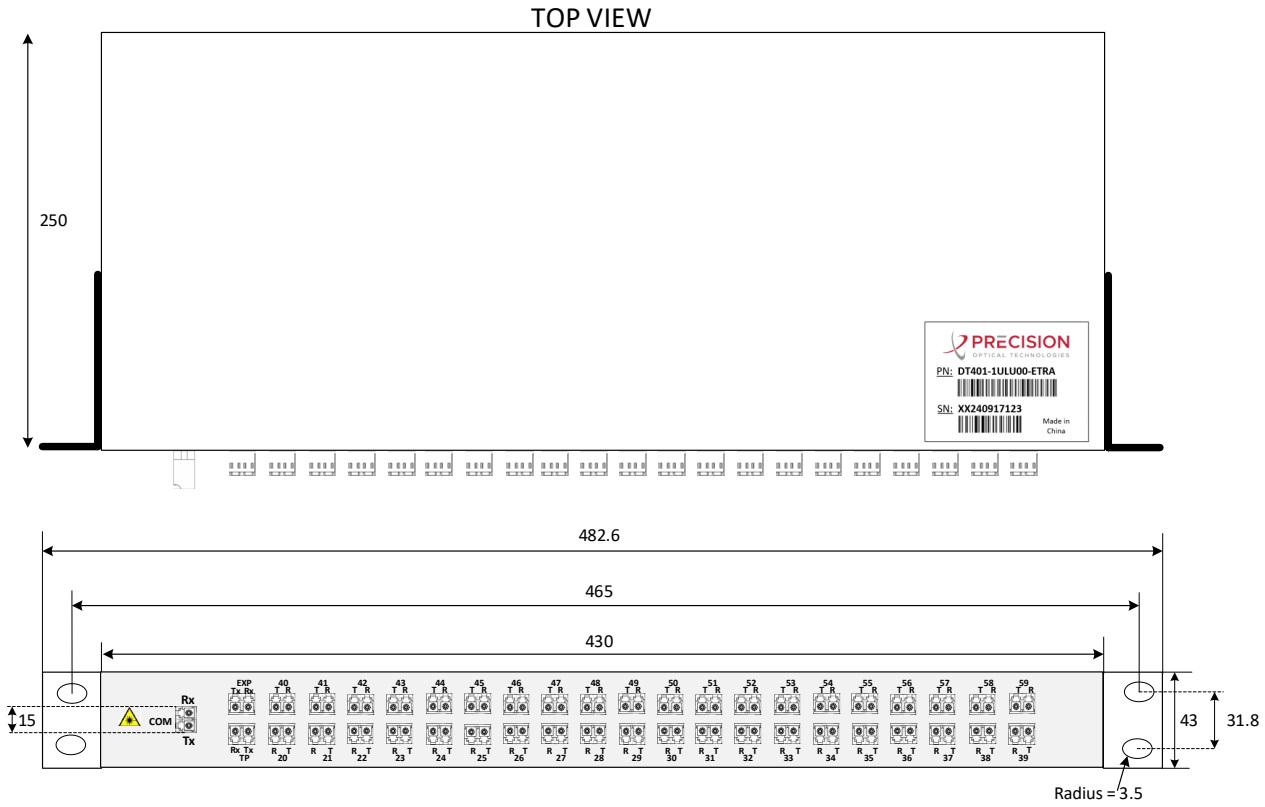


40-Channel Single DWDM, AWG + TFF Design (high level)



40-Channel Twin DWDM, AWG + TFF Design (high level)

Filter Physical Design



40-Channel DWDM External Design (mm)
(DT401-1ULU00-ETRA shown)