

16 & 20-Channel DWDM Passive Filter ISP (Indoor Use)

Product Description:

16 & 20-Channel ISP DWDM Thin Film Filter with the following options:

- Upgrade/Express/Test Ports
- Single/Dual/Twin LGX Form Factor
- UPC/APC Connectors
- Industrial Temperature Hardened



Product Ordering Information

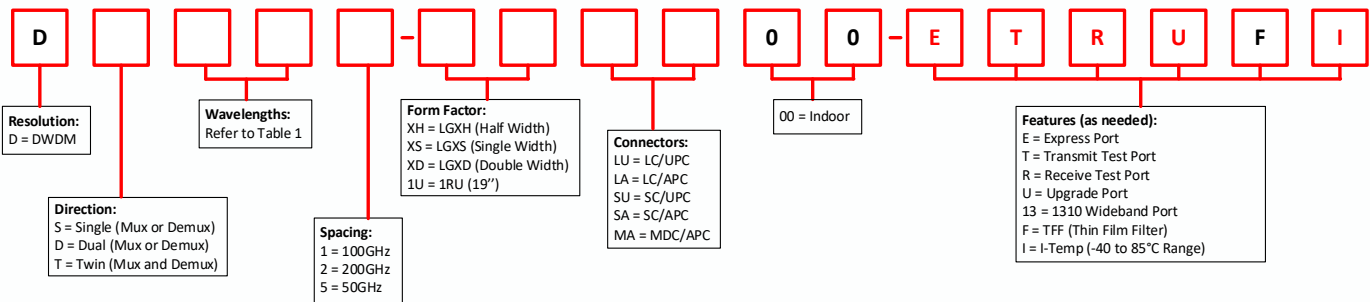


Table 1

CHANNEL DESIGNATION	
16 = ITU 25 - 40	21 = ITU 20 - 39
16A = ITU 20 - 35	22 = ITU 40 - 59

Part Number / Description Examples

Part Number	Single Description
DS161-XSLU00-ETRUF	DWDM, Single (Mux or Demux), ITU 25-40, 100GHz grid, LGX single width, LC-UPC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter
DS211-XSLU00-ETRUF	DWDM, Single (Mux or Demux), ITU 20-39, 100GHz grid, LGX single width, LC-UPC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter
Part Number	Dual Description
DD16A1-XDLA00-ETRUF	DWDM, Dual (Mux or Demux), ITU 20-35, 100GHz grid, LGX double width, LC-APC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter
DD221-XDLU00-ETRUF	DWDM, Dual (Mux or Demux), ITU 40-59, 100GHz grid, LGX double width, LC-UPC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter

16 & 20-Channel DWDM Passive Filter

ISP (Indoor Use)

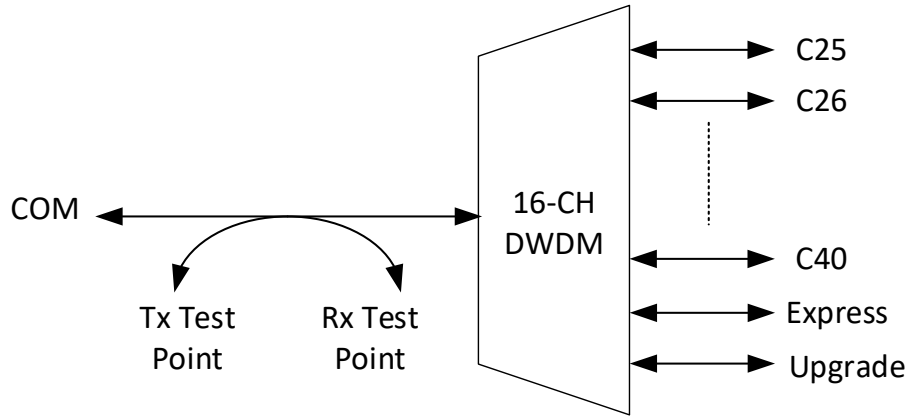


Part Number	Twin Description
DT161-XDLU00-ETRUF	DWDM, Twin (Mux + Demux), ITU 25-40, 100GHz grid, LGX double width, LC-UPC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter
DT211-1ULU00-ETRUF1	DWDM, Twin (Mux + Demux), ITU 20-39, 100GHz grid, 1RU 19" wide (include brackets), LC-UPC, with Express + Transmit Test + Receive Test + Upgrade ports, Thin Film Filter, I-Temp

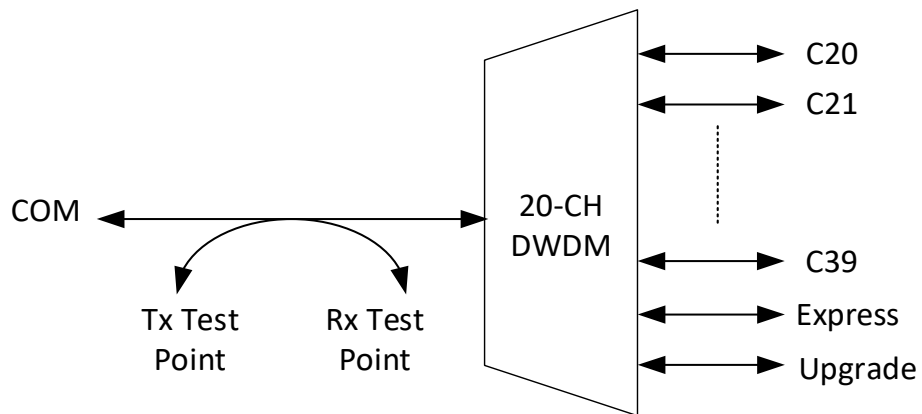
Optical Characteristics

Parameter	Value	Unit
DWDM Passband @ -0.5dB	$\lambda_c \pm 0.125$	nm
DWDM passband insertion loss @ -0.5dB	< 3.5 (16-Ch) < 3.8 (20-Ch)	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
Upgrade insertion loss	< 3.5	dB
Upgrade passband	Any ITU wavelengths within ITU 14 to 62 that is not being designated on the front plate	nm
1310 port insertion loss	< 1.5	dB
1310 port passband ripple	< 0.5	dB
1310 port passband	~1260-1360	dB
DWDM uniformity	< 1.5	dB
Isolation Adj (COM-DWDM)	> 30	dB
Isolation Non-Adj (COM-DWDM)	> 45	dB
Isolation Non-Adj (COM-EXP)	> 12	dB
DWDM directivity	> 50	dB
EXPRESS directivity	> 45	dB
Return loss	> 45	dB
Polarization dependent loss	< 0.2	dB
Polarization mode dispersion	< 0.15	ps
IL thermal stability	< 0.005	dB/°C
Wavelength thermal stability	< 0.001	nm/°C
Maximum input power	300 / 24.8	mW/dBm
Operating Temperature:		
Commercial Temp (standard)	0 to 70	°C
Industrial Temp	-40 to 85	
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



16-Channel DWDM Design (high level)

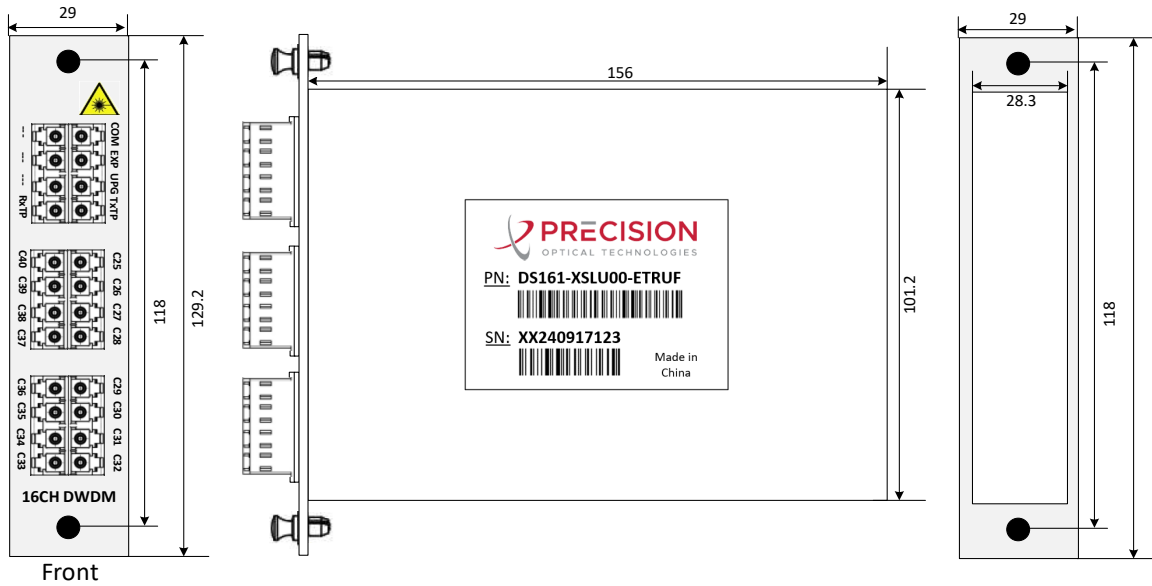


20-Channel DWDM Design (high level)

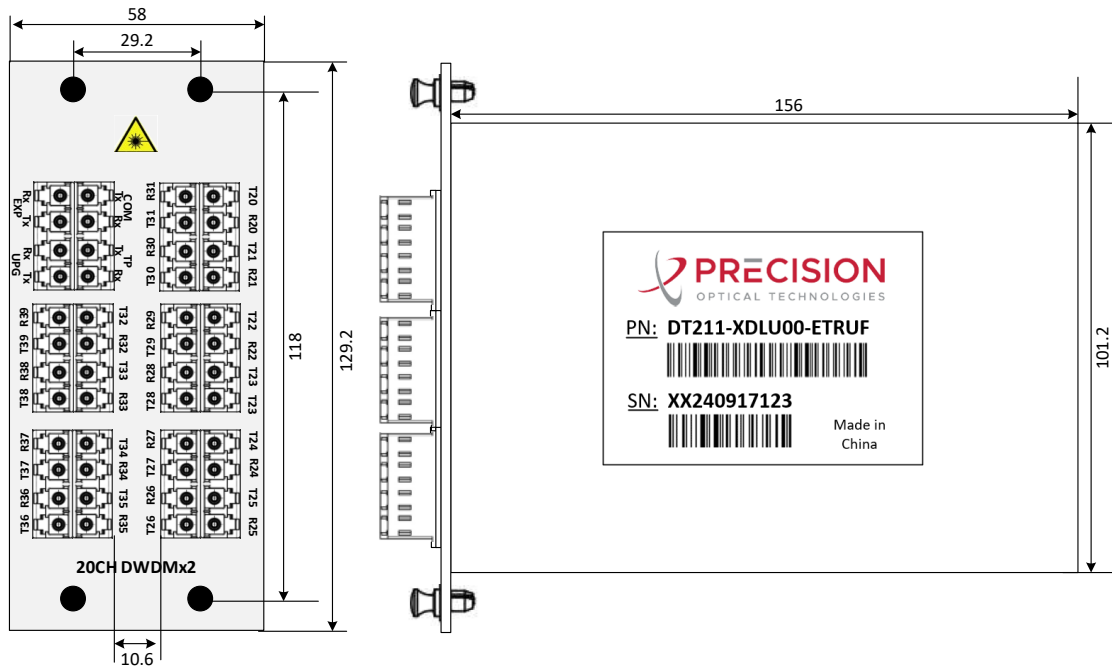
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ISP (Indoor Use)

Filter Physical Design

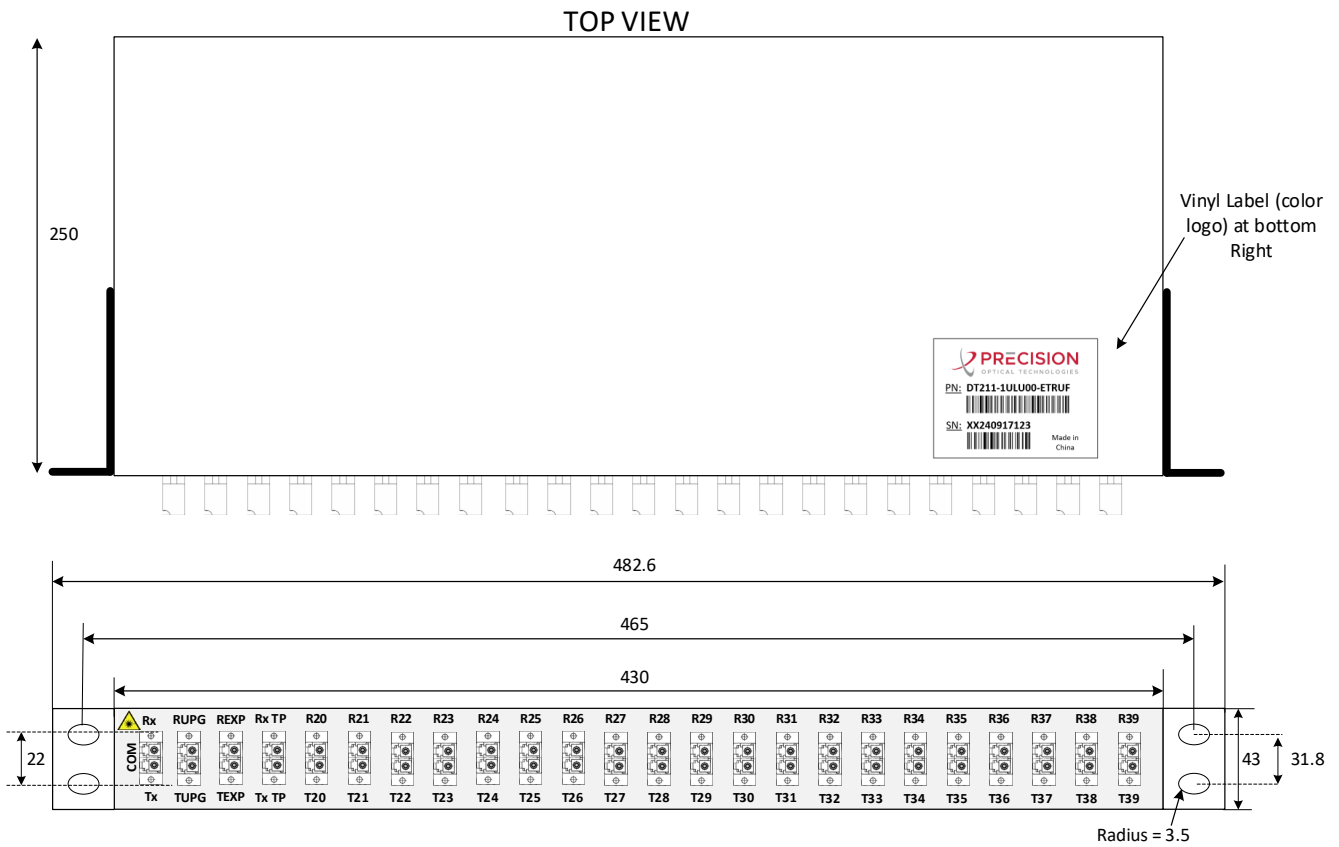


16-Channel DWDM External Design (mm)
(DS161-XSLU00-ETRUF shown)



20-Channel DWDM External Design (mm)
(DT211-XDLU00-ETRUF shown)

16 & 20-Channel DWDM Passive Filter ISP (Indoor Use)



20-Channel 1RU DWDM External Design (mm)
(DT211-1ULU00-ETRUF shown)