

# Bi-Directional Forward Error Correction Unit

The Avara FEC Unit improves the optical signal to noise ratio for increasing transmission distances for SDH STM-4 and SONET OC-12 based transmission systems

The Avara Forward Error Correction product is a rack mountable device for use in long haul optical links to improve the optical signal to noise ratio, increase Line power budget, and to increase transmission distances.

It is a bidirectional OEO device with the FEC encoding and decoding functions designed specifically for SDH STM-4 / SONET OC-12 optical transmission systems.

This device provides transmit-receive optical interfaces of client side and line side.

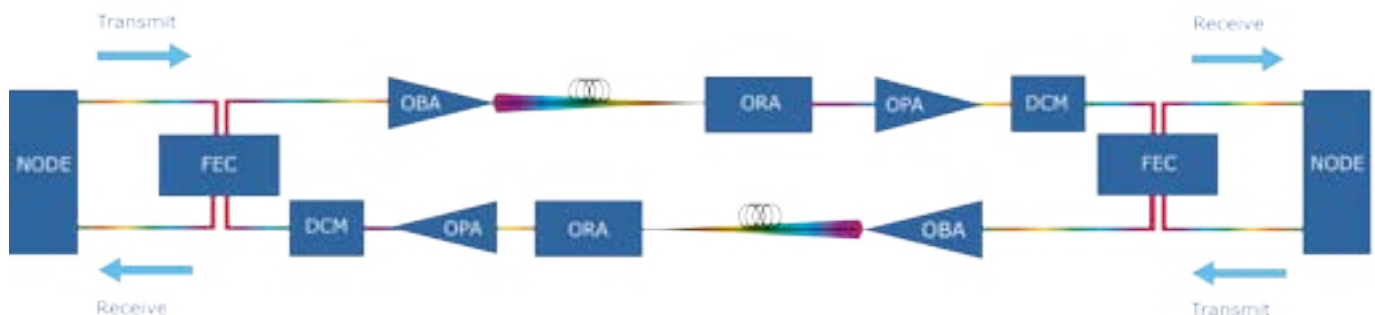
## Technical Highlights

- Wide operating temperature range
- 19 inch rack mounting for easy installation
- 2 Rack Units height
- -48 VDC power supply
- Temperature monitoring
- High reliability
- Low power consumption



## Components for Long Haul Optical Fibre Link

Avara has a full range of optical modules, as per the diagram below, to meet various link budgets and performance targets including dispersion compensation.



- FEC** - Forward Error Correction Module
- OBA** - Optical Booster Amplifier
- ORA** - Optical RAMAN Amplifier
- OPA** - Optical Pre-Amplifier
- DCM** - Dispersion Compensation Module

Full individual brochures available for above products.

# Technical Specifications



<b>Model Order Code</b>	P21017.51 FEC-622M Forward Error Correction 622M	<b>Power</b>	-40 to -57 VDC Power Supply Power Consumption 15W
		<b>Environmental</b>	Operating Temp. Relative Humidity 0°C to +50°C 5 - 85% (Non-condensing)
<b>Mechanical</b>	Height Depth Width  <i>measurements inclusive of mounting ears</i>	<b>Standards</b>	EN60950 Safety 41003 Laser Safety EN60825-1 Class 1 ETS 300 019 -1-1 Operational ETS 300 019 -1-2 Storage ETS 300 019 -1-3 Transport EN55022 Class A Emissions EN55024 Immunity Generic Immunity

Line Side Port			
Parameter	Min	Typ	Max
<b>Receiver</b>			
Bit Rate		669.33Mb/s	
Receiver Wavelength	1528nm		1564nm
Receiver Sensitivity			-28dBm
Receiver Overload Power	-3dBm		
LOS Assert	-40dBm		
<b>Transmitter</b>			
Centre Wavelength		1550.12nm	
Spectral Width (-20dB)			0.3nm
SMSR	30dB		
Output Optical Power Level	0dBm	3dBm	7dBm
Extinction Ratio	8.2dB		

Client Side Port			
Parameter	Min	Typ	Max
<b>Receiver</b>			
Bit Rate		622.08Mb/s	
Receiver Wavelength	1260nm		1580nm
Receiver Sensitivity			-28dBm
Receiver Overload Power	-3dBm		
LOS Assert	-30dBm		
<b>Transmitter</b>			
Centre Wavelength	1260nm	1310nm	1360nm
Spectral Width (-20dB)			4nm
Output Optical Power Level	-15dBm	-12dBm	-8dBm
Extinction Ratio	8.2dB		
Transmission Distance		2km	10km



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## Regional Distributor

