

DATA SHEET

Multi-Rate 40 Channel Open Line System (40 or 80km)

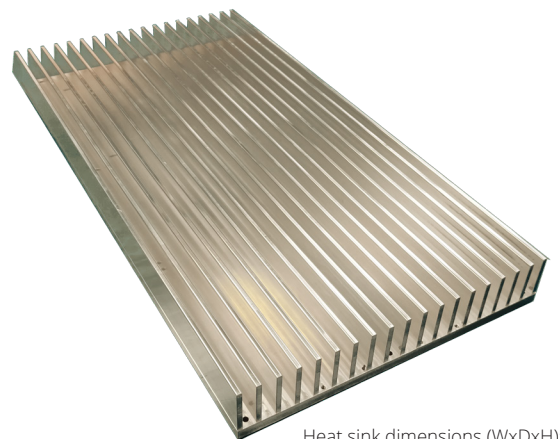


Champion ONE's Multi-Rate 40 Channel Open Line System is a complete, high-reliability active DWDM line system for long-distance, high-bandwidth applications. It provides all of the optical grooming necessary for transmission of up to 40x channels of multiple data rates while maintaining the simplicity of automated zero-touch provisioning.

The 40 channel multi-rate system comes in two versions: 40km and 80km. Both versions are composed of a mux/demux, optical amplifiers, dispersion compensation modules, and an optical supervisory channel.

Key Features and Benefits

- Zero-Touch Provisioning
- Turns up within 4-5 minutes
- Supports between 1 and 40 DWDM channels at 1G, 2.5G, 10G, 25G, 40G, 50G, or 100G data rates
- Automatic link distance measurement and fault location with OTDR
- Automatically performs all the necessary dispersion compensation adjustments based on integrated OTDR input
- Automatic input balancing via VOA integration into mux to optimize distance
- Fiber Integrity Monitor System for laser safety, enabling automatic laser shutdown (ALS) in the event of a fiber break or connector disconnect, and automatic laser restart (ALR) when the condition is recovered
- Remote monitoring of far end unit
- Performance Monitoring to track max/min/average of key parameters on 15min/daily/weekly basis
- CLI, Web GUI interface, SNMP v2/v3 management interfaces
- Field-replaceable optical service channel SFP
- Dual field-replaceable 110VAC power supplies
- 3 field-replaceable fans for front-to-back airflow for multiple cooling options for superior performance
- 2RU enclosure including 1RU internal heat-sink (see Figure A at right) for improved performance and durability



Heat sink dimensions (WxDxH):
220mm x 436mm x 37mm

Technical Specifications

Parameter	40 Channel Open Line System
DWDM Channel Count	40
DWDM Channel Wavelengths (min/max, THz)	192.0 / 195.9, 100GHz spacing (ITU ch. 20 / 59)
Average Input Power per Wavelength (min/max, dB)	-11 / -8
Tx Launch Power/Wavelength (min/max, dB)	0.3 / 3.7
Link Loss Budget (min/max, dB)	18
Output OSNR (min, dB)	31.0 (tested under transmit signal OSNR 58dB)
Output Power/Wavelength (min/max, dB)	-2.3 / 1.4
Input Voltage Range (min/max, VAC)	90 / 264
Input Frequency Range (min/max, Hz)	47 / 63
Current Consumption (A)	2 (@ 90 VAC) 0.7 (@ 264 VAC)
Power Consumption (W)	50
Operating Temperature (min/max, °C)	0 / 40
Storage Temperature (min/max, °C)	-40 / 70
Operating Humidity (min/max, %)	5 / 95
Dimensions (WxDxH, in)	16 7/8" x 36 1/8" x 3 1/2" (19" wide w/ brackets)
Software Interface	CLI Web Craft Terminal SNMP v2 or v3
Optical Performance Metrics	EDFA booster amplifier operating parameters VOA settings Dispersion compensation settings EDFA pre-amplifier operating parameters

Ordering Information

C1 Part Number	Description
ZAD-40-TDC-40-V-AC-M	Multi-Rate 40ch Active DWDM Open Line System, 0-40km, AC power supply included
ZAD-40-TDF-80-V-AC-M	Multi-Rate 40ch Active DWDM Open Line System, 40-80km, AC power supply included
ZAD-8-X-X-X-AC-X	AC Power Supply (spare/replacement)
ZAD-8-X-X-X-FAN-X	Fan module for 40ch OLS (spare/replacement)
ZAD-8-X-X-X-RLS-X	Slide Rails for mounting
SERVICE AND SUPPORT	
ZAD-247-W-S	Hotline Support: 24 hours/day, 7 days/week
ZAD-3-W-S	36-Month Extended Warranty (inclusive of standard 12-month warranty)
ZAD-5-W-S	60-Month Extended Warranty (inclusive of standard 12-month warranty)