

COMMSCOPE OR3144H

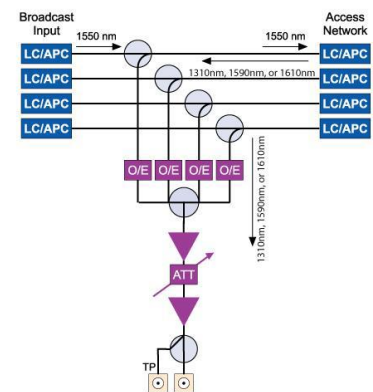
HRFOG DIPLEXER/RETURN RECEIVER

The COMMSCOPE OR3144H RFOG Diplexer/Return Receiver provides, in a single half-depth module, a completely integrated diplexer/return receiver for RFOG applications where digital receivers are located in a headend or hub facility.

In the OR3144H, eight LC/APC connectors provide the interface for four 1550 nm forward signal inputs and four access network ports (1550 nm downstream output and return signal inputs of 1310, 1590, or 1610 nm). The combined RF return signals are output through an F-type connector on the front panel of the module.



- Enables deployments of RFOG applications
- Low optical insertion loss
- Low noise
- Low power consumption
- 5–85 MHz passband
- Eight LC/APC connectors provide four 1550 nm forward signal inputs and four network outputs (1550nm forward and 1310nm, 1590 nm, or 1610nm return)
- RF attenuator
- Front panel –20 dB test port for RF return
- Hot plug in/out
- Local and remote status monitoring capability
- One half-depth slot in CH3000 Chassis



SPECIFICATIONS

PHYSICAL	
Dimensions (without connectors)	6.6" D x 4.3" H x 1.0" W (3RU) (16.7cm x 11cm x 2.5 cm)
Weight	1.5 lbs (0.68 kg)
ENVIRONMENTAL	
Operating temperature range	–20°to +65°C (–4°to 149°F)
Storage temperature range	–40°to +85°C (–40°to 185°F)
Humidity	5% to 95% non-condensing
GENERAL	
Nominal wavelengths	•Broadcast passthrough: 1550 nm •O/E upstream: 1310 nm, 1590 nm, or 1610 nm
Hot plug-in/out	
POWER REQUIREMENTS	
Input voltage	12 VDC (165 mA)
Power consumption, typ	2 W
CONNECTORS	
Optical connectors	•Broadcast input: 4 LC/APC connectors •Access network: 4 LC/APC connectors
Return path RF output connector	F-type, female (at front panel)
RF test point	G-type (at front panel, –20 dB)
OPTICAL	
BC INP to Access Network (downstream):	•Passband: 1540.2 -1564.3 nm •Insertion loss (including connectors), max: 0.9 dB •Isolation, BC INP to O/E, typ: 65 dB •Output power per path, max: 20 dBm (at Access Network output)
Access Network to O/E (upstream)	•Passband: 1260 -1530 nm and 1570 -1620 nm •Insertion loss (including connectors), max: 1.5 dB •Optical input power per path, nominal: –24 to –15 dBm

ELECTRICAL, RETURN RF	
Passband	5–85 MHz
Frequency response	±1.0 dB
Output return loss, min	18 dB
Level stability	±0.5 dB
Nominal output level at full gain	34 dBmV (–24 dBm optical input, 26.7% OMI)
Gain control range	0–20 dB
Gain control step	1 dB

ORDERING INFORMATION

