

FEATURES

- Supports 1.2 GHz forward path operation in Fiber Deep networks
- Support for fiber deep network architecture via high gain
- Supports status monitoring
- Non-interruptible plug-in adjustable PAD
- Adjustable optical input threshold levels
- Compatible with the OM6 series nodes

The highly versatile CommScope 1.2 GHz Forward Receiver provides full support for up to 1.2 GHz forward path operation in fiber deep networks. The receiver is fully compatible with OM6000™ fiber deep nodes and supports an optical input range of -8 to +1 dBm. The receiver also allows end users to adjust optical input threshold levels to maintain consistency with their system design parameters.



SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions (H x L x W)	6.0 in x 4.3 in x 1.25 in (15.24 cm x 10.9 cm x 3.2 cm)
Weight	≤ 1.1 lb (≤ 0.5 kg)
Environmental	
Operating Temperature Range	-40° to 60°C (-40° to 140°F)
Storage Temperature Range	-40° to +85°C (-40° to +185°F)
Humidity	5% to 95% non-condensing
Optical	
Optical Wavelength	1260 to 1620 nm
Optical Input Return Loss	40 dB, min
Equivalent Input Noise Current	3.5 dB pA/H1/2
Optical Input Range ¹	-8 to +1 dBm
Optical Power Threshold Alarm Limits, min	-10 to 0 dBm (user settable)
Optical Power Test Point	1 ± 10% V/mW
RF	
Impedance	75 Ω
Frequency Range	54 to 1218 MHz
Slope	+10 ± 1.0 dB
Flatness ²	± 0.75 dB
Return Loss	15 dB, min
RF Output Level @ 1218 MHz (actual) ³	50 dBmV, min
RF Output Test Point	-20 (± 1.0) dB
Low Frequency Isolation	15 dB, min
Performance⁴	
Channel Loading	148 ITU-T J.83 Annex B SC-QAM 256 + 1, 192 MHz OFDM Channel SC-QAM from 108–1002 MHz, OFDM from 1026–1218 MHz
MER ^{4,5}	46.0 dB (typical)
BER (Pre-FEC) ^{4,5}	1E-08 (ITU-T J.83 Annex B SC-QAM 256)
Power Requirements	
34 V Supply Current	340 mA, max 480 mA, max
5 V Supply Current	780 mA, max
Power Consumption	15.5 W, max 20.2 W, max

NOTES:

1. Circuit resiliency to +5 dBm.
2. Flatness is factory aligned with 6 dB of attenuation and measured with respect to slope.
3. RF output level is minimum @ 1218 MHz with -8 dBm received power, a 0 dB PAD, and transmitter OMI of 2.2%.
4. MER corrected for source contribution.
5. Operating temperature is defined for the node environment.

ORDERING INFORMATION

Model Name	Description
1510054-001	OM6000 1.2 GHz Fiber Deep 34 V Forward Path Optical Receiver, SC/APC

RELATED PRODUCTS

CH3000 Headend Optics	CHP Max5000® Headend Optics
Remote PHY Device (RPD)	Optical Service Cables
OM6000 Power Supplies	Installation Services

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656



Note: Specifications are subject to change without notice.

Copyright Statement: © 2021 CommScope, Inc. All rights reserved. ARRIS, the ARRIS logo, CHP Max5000, OM6000, and Opti Max are trademarks of CommScope, Inc. and/or its affiliates. All other trademarks are the property of their respective owners. No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

1513488_OM6 1.2 GHz Fiber Deep Forward Receiver_RevB