DATA SHEET

RF over Glass (RFoG)

RFoG ONU (R-ONU)

CPE Summary

FEATURES

- Latest technology RFoG ONUs for SDU and MDU, including high-gain (48 dBmV) MDU applications
- Standards-compliant "OBI-free" technology models support DOCSIS® 3.0 upstream performance operation
- OBI-free versions support a variety of worldwide implementation needs, supporting up to 16 R-ONUs per optical receiver
- 10 Gbps symmetrical PON pass-through versions support fast-growing RF+PON applications
- 5–42, 5–60, 5–65, or 5–85 MHz return options on 1610 nm wavelength
- 51, 72, 85, or 102 to 1218 MHz (1.2 GHz) forward bandwidth options on 1550 nm wavelengths
- Rugged cast housings meet tough environmental conditions
- Indoor and outdoor mounting options

CommScope provides leading-edge RFoG compliant Optical Network Units (R-ONUs) enabling cable operators easy deployment of advanced fiber-to-the-home and fiber-to-the-building topologies that provide complete subscriber support while seamlessly integrating with existing headend and back-office technology and procedures. CommScope R-ONUs support any RFoG solution that uses standard industry wavelengths to and from the customer premises. A large variety of model options are available to support worldwide deployments, features, and applications including Single Dwelling Unit (SDU), Multi-Dwelling Unit (MDU), and High-Output MDU (MDU-HO) installations. All models with 1610 nm returns support the optical overlay of both 10G and 1G PON signals without impacting existing RFoG services. PON pass-through versions are available with 1G, or both 10G and 1G connectivity, enabling operators to deploy advanced data services as required.

CommScope's innovative "OBI-free" R-ONUs eliminate Optical Beat Interference (OBI) that has been an issue in traditional RFoG deployments. CommScope OBI-free R-ONU technology supports simultaneous upstream RF channel transmissions, enabling multiple MAC domains and full DOCSIS 3.0 channel usage to efficiently coexist, providing full use of available upstream bandwidth usage for RF returns. OBI-free technology on selected models supports up to 16 R-ONUs transmitting into a single optical receiver input. Lower cost non-OBI-free R-ONUs are also available.

R-ONUs supporting all standard return passbands with forward bandwidths up to 1.2 GHz are available. All units are constructed in rugged cast metal housings and meet wide temperature ranges for both indoor and outdoor installations. Protective covers and various mounting hardware is available.

SPECIFICATIONS

Model Name	SDU/MDU	RF Output Power (dBmV)	Rtn/Fwd Passband Options (MHz)	Fwd Upper Freq (MHz)	Return (nm)	OBI-free	1G/10G PON	Power Supply
CP801TU-01-00	SDU	19	x = 1	1002	1610	Unmanaged-fixed		PS1921W-10
CP85xTU-01-00	MDU	36	x = 1, 4, 9	1002	1610	Unmanaged-fixed		PS1921W-10
CP85xWU-01-00	MDU	36	x = 1, 4, 9	1002	1610	Unmanaged-fixed	✓	PS1921W-10
CP86xTU-01-00	MDU-HO	48	x = 1, 4, 6, 9	1218	1610	Unmanaged-fixed		NA: Built-in
CP86xWU-01-00	MDU-HO	48	x = 1, 4, 6, 9	1218	1610	Unmanaged-fixed	✓	NA: Built-in
CP80x5U-02-10	SDU	19	x = 1, 4, 9	1002	1610	NA		PS1911W, PS1921W-10
CP80x8U-02-10	SDU	19	x = 1, 4, 9	1002	1610	NA	✓	PS1911W, PS1921W-10
CP80x5U-20-10	SDU	20	x = 1, 4, 9	1218	1610	NA		PS1911W, PS1921W-10
CP80x8U-20-10	SDU	20	x = 1, 4, 9	1218	1610	NA	✓	PS1911W, PS1921W-10
CP85x7U-00-10	MDU	36	x = 1, 4	1002	1610	NA		PS1911W, PS1921W-10
CP85x8U-00-10	MDU	36	x = 1, 4, 9	1002	1610	NA	✓	PS1911W, PS1921W-10
Please see individual Data Sheets for complete details.	HO=high output		1=42/54; 4=65/85; 6=60/72; 9=85/102 Return lower limit for all p/ns = 5 MHz			Unmanaged-fixed OBI-free requires the manual setting of a pre-conditioning switch within the R-ONU.	10/10G; 10/1G; 1/1G	PS1911W-00 = USA PS1921W-10 = Universal, meets DOE Class VI efficiency requirements

RELATED PRODUCTS

Indoor and Outdoor Covers and Enclosures	CE8302H-IND Mounting Bracket/Fiber Tray
XE4202M Remote OLT (R-OLT)	OR3xxx, OR4xxx Optical Receivers

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Note: Specifications are subject to change without notice.

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