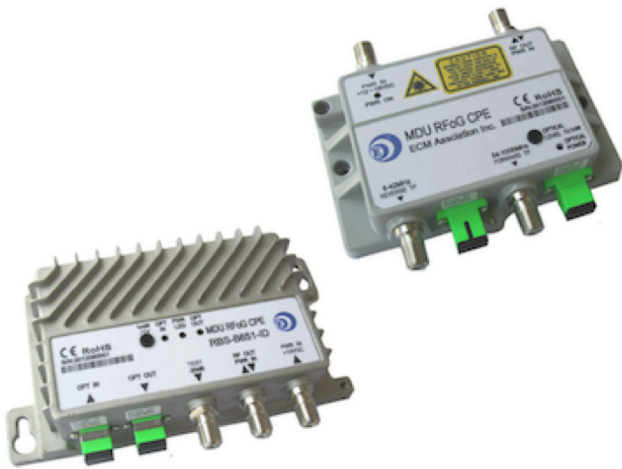


ECM ASSOCIATION



RFoG ONU

- **RFoG ONU, COMPRISES A DOWNSTREAM RECEIVER AND AN UPSTREAM TRANSMITTER**
- **RFoG ONU, WITH PON EXPANSION PORT**
- **RFoG ONU, WITH FWD PASS-THRU**
- **RFoG ONU, WITH PON EXPANSION PORT& FWD PASS-THRU**

The RP-1200/RP-1300 series are designed to meet various requirements for modular and flexible solutions in fiber optic network, enabling high performance data, telephony, and TV services.

For establishing and developing the state-of-the-art products in the field of RF over fiber, ECM is committed to be a permanent and reliable entity for customers and partners.

BENEFIT & DESCRIPTION

High flexible integration, cost effective are major benefits of ECM'S RFoG ONU series products. ECM offers a methodology for customers to maximize operational efficiently by selecting RFoG ONU that works reliably across multiple platforms.

We also provide customization to meet different conditions, for example, RF output level with or without AGC and CATV test plan for the receiver and optical output power and burst mode operation for the transmitter, and multiple pass-band option of diplexer filters for RFoG ONU, in accordance with real environment.

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS

- Storage Temperature -40 ~ 65°C
- Operating Temperature 0 ~ 50°C
- Power Consumption
 - RP-1200 series 12V / 400mA
 - RP-1300 series 12V / 100mA
- LED Indicators
 - Operating Input Voltage Status
 - Rx Optical Input Power Status
 - Tx LD Status

OPTICAL SPECIFICATIONS

Forward Path Receiver RP-1200 series

- SC/APC Connector
- Receiver Wavelength 1540 ~ 1565nm
- Optical Input Range 0 ~ -8dBm
- AGC Range, RP-1200 series 0 ~ -8dBm
- Optical Input Power Threshold \leq -12dBm

Return Path Transmitter RP-1200 series/ RP-1300 series

- Transmitter Wavelength 1600 ~ 1620nm
- Optical Output Power Tx Turns ON 3.0 ± 1.5 dBm
- Optical Output Power Tx Turns OFF \leq -30dBm

ELECTRICAL SPECIFICATIONS

Forward Path Receiver RP-1200 series

- Frequency Bandwidth 54/85/105 ~ 1002MHz
- RF Output Level RF-1200 series 77 ~ 81dB μ V
- Flatness \pm 1.5dB over downstream bandwidth
- Return Loss \geq 16dB@54MHz, -1.5dB/ octave
- CNR \geq 48dB@-5dBm input, OMI 3.5%/ch
- CTB \geq 60dBc@ 0dBm input, OMI 3.5%/ch
- CSO \geq 60dBc@ 0dBm input, OMI 3.5%/ch

Return Path Transmitter RP-1200 series/ RP-1300 series

- Frequency Bandwidth 5 ~ 42/65/85MHz
- Flatness \pm 1dB over upstream bandwidth
- NPR Dynamic Range @ 30dB NPR \geq 15dB
- RF Input Return Loss \geq 16dB

OPTICAL PASS THROUGH

RP-1200 / RP-1300 series

- Insertion Loss from Common port to PON expansion port, 1490nm, $\leq 1\text{dB}$
- Insertion Loss from PON expansion port to common port, 1310nm, $\leq 1\text{dB}$
- Isolation from common port to PON expansion port, 1550nm, $\geq 15\text{dB}$
- Isolation at PON expansion port, 1610nm, $\geq 15\text{dB}$

RF PASS THROUGH

RP-1200 / RP-1300 series

- Passband 54/85/105 ~ 1002MHz
- Flatness $\pm 1\text{dB}$ over downstream bandwidth
- Loss $\leq 1.5\text{dB}$