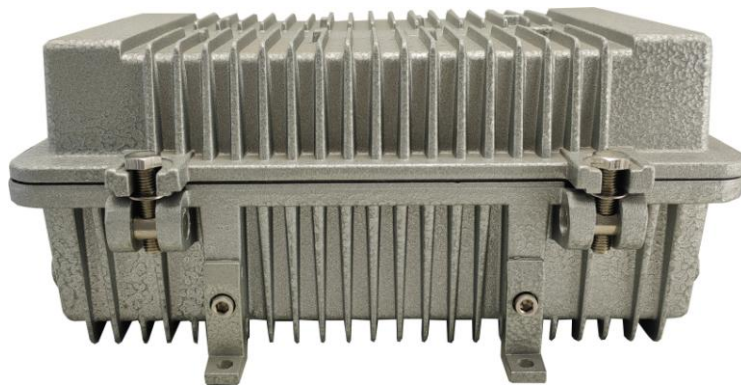# GRT319 Remote OLT

GRT319 Remote OLT is designed to replace HFC optical node, converting the last 100 meter coaxial cable distribution network into the last 100 meter fiber to the home network, offering both DVB-C RF and GPON internet services to all CATV subscribers. With Aluminum water-proof housing, GRT319 has one fiber input port where 10Gbps data and 1550nm CATV RF are directly from Headend by WDM, saving trunk fiber investment. GRT319 has one fiber output integrating built-in 20dBm EDFA and single port GPON OLT, supporting up to 256 subscribers in the radius of 100 meter FTTH cable. Working with GFH1000 FTTH CATV receiver, GRT319 Remote OLT keeps DVB-C STB only business for CATV subscribers. Working with GONU1100W FTTH ONU, GRT319 Remote OLT provides 2.5Gbps down streaming internet besides CATV RF.

Node by node, GRT319 can assist CATV MSO converting one-way HFC CATV system into two-way FTTH system at the affordable budget.

Features:

- Compact Aluminum die-casting water proof housing
- One fiber input for 1550nm RF and 1270nm/1330nm 10Gpbs Data
- One fiber output for 1550nm and 1490nm/1310nm GPON
- Internal EDFA 20dBm output
- Single Port GPON OLT 1310nm/1490nm
- Supporting Maximum 256 CATV subscribers
- Replacing the last optical node or MDU amplifier
- 60V or 220V AC power supply

Specifications

Item	Parameter
Input Fiber Port	One
Input Optical Wavelength	1260nm~1650nm
CATV Input	1555nm±5nm
1550nm Input Optical Power	>+1dBm@1550nm
Data Input	1270nm/1330nm 10Gpbs SFP+ Single Fiber BiDi Transceiver
Input Optical Connector	SC/APC
Optical Return Loss	45 dB
1G/10G Uplink Port	2 RJ-45 ports: 100/1000M auto-negotiation 1*SFP+ (SFP+ is compatible with 10GE)
Management Port	1*USB Type-C port
GPON Port	One 9/125um port, SC/UPC, Class C++/C+++ Upstream 1.244Gbps; Downstream 2.448Gbps Wavelength: Tx1490nm/Rx1310nm Max Split: 1×256; Fiber Distance: 5Km
Backplane Bandwidth	60Gbps
Port Forwarding Rate	21.576Mpps
GPON Function	Tcont DBA Gemport traffic In compliant with ITU-T984.xstandard Up to 20KM transmission Distance Support data encryption, multi-cast, port VLAN, separation, etc Support ONT auto-discovery/link detection/remote upgrade Support VLAN and user separation to avoid broadcast storm Support power-off alarm function. Easy for link problem detection Support broadcasting storm resistance function
Management Mode	Web/Telnet/CLI Port Status monitoring and configuration management Online ONT configuration and management User management Alarm management
Layer2 Switch	1K Mac address Support 4096 VLANs Support port VLAN Support VLAN tag/Un-tag,VLAN transparent transmission Support storm control based on port Support port isolation Support port rate limitation Support 802.1D and 802.1W Access control list IEEE802.x flowcontrol Port stability statistic and monitoring

Output Fiber Port	One
Output Fiber Wavelength	Tx: 1550nm & 1490nm Rx: 1310nm
1550nm Output Power	20dBm
Optical Fiber Connector	SC/APC
Environment	
Power Supply	60V AC (powered at independent Female F port) or 110V or 220V AC at CE or UL power plug
Power Consumption	<16W
Working Temperature	-20 ~ +50℃
Storage Temperature	-40 ~ +70℃
Relative Humidity	5% ~ 95% non-condensing
Housing Dimension (L*W*H)	282mm×163mm×116mm
Weight	2.6Kg

Accessory single fiber bi-directional SFP+ linking headend switch:
SFP-GW23TG-20Dx (10.3Gbps SFP+ BIDI Transceiver, Single Mode, 20km, 1270nmTx/1330nmRx)
SFP-GW32TG-20Dx (10.3Gbps SFP+ BIDI Transceiver, Single Mode, 20km, 1330nmTx/1270nmRx)