

# PRODUCT BRIEF



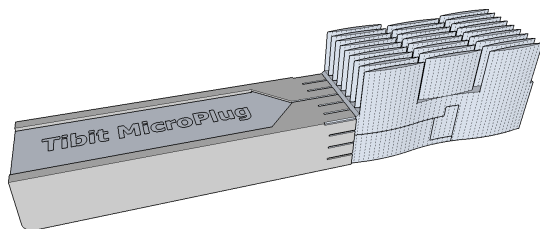
## TIBIT MICROPLUG

VIRTUALIZING NETWORKS

# TIBIT 10G SFP+ OLT

### FEATURES

- 10G OPTICAL TRANSCEIVER WITH EMBEDDED UNIVERSAL ETHERNET-TO-PON MAC BRIDGE
- CONFIGURABLE FOR EPON OR NG-PON2 PROTOCOLS
- HOT-PLUGGABLE SFP+ FOOTPRINT
- SUPPORTS SYMMETRIC 10G/10G (NG-PON2 AND EPON) **AND** ASYMMETRIC (10G/1G) RATES (EPON ONLY)
- COMPLIANT WITH ITU-T G.989 SPECIFICATIONS (NG-PON2 MODE)
- IN EPON MODE:
  - COMPLIANT WITH IEEE802.3AV, SIEPON AND DPOE SPECIFICATIONS
  - IEEE AES AND CTC TRIPLE-CHURNING SECURITY
- IN-BAND MANAGEMENT VIA ETHERNET OAM
- IEEE1588 TRANSPORT
- CLASS N1/N2 XGS OR PR20+/PRX30 OPTICAL POWER BUDGET:
  - 1577NM EML DFB LASER (10G)
  - 1270..1310NM APD/TIA BURST RECEIVER (10G/1G)
- INTEGRATED DIGITAL DIAGNOSTICS AND MONITORING (SFF-8472)
- SINGLE FIBER SC RECEPTACLE
- SFI LOCAL INTERFACE
- ENHANCED JITTER PERFORMANCE
- LOW POWER
- COMMERCIAL AND ENHANCED TEMPERATURE



### OVERVIEW

TIBIT'S UNIVERSAL 10G OLT MICROPLUG IS A CONFIGURABLE FOR NG-PON2 OR EPON HOT-PLUGGABLE SFP+ OPTICAL TRANSCEIVER WITH A BUILT-IN 10G ETHERNET-TO-PON MAC BRIDGE. IT USES 10G XGS/EPON OPTICS TO ENABLE NG-PON2 SOLUTION AT A FRACTION OF THE COST OF TUNABLE DWDM OPTICS.

IN EPON MODE THE MAC ALLOWS CO-EXISTENCE BY OPERATING IN SYMMETRIC (10G UPSTREAM/10G DOWNSTREAM) AND ASYMMETRIC (10G DOWNSTREAM/1G UPSTREAM) TDM MODE.

THIS 10G OLT PLUGS INTO LOW-COST ETHERNET SWITCHES OR OTHER ETHERNET-ENABLED NETWORKING EQUIPMENT WITH SFP+ SOCKETS INSTANTANEOUSLY ENABLING THEM TO BE PART OF ANY 10G PON NETWORK. IT ENABLES CABLE MSOs TO TRANSFORM THEIR ANALOG HFC NETWORKS TO FULLY DIGITAL, HIGH BANDWIDTH NETWORKS. IT CONNECTS MULTIPLE ETHERNET NETWORKS IN THE HEAD-END, HUB-SITE, FIBER NODE, ON THE POLE, OR MULTI-DWELLING UNIT (MDU) BASEMENT WHEN DEPLOYED AS AN ETHERNET ACCESS BRIDGE.

THE SFP+ OLT IS IDEALLY SUITED FOR SOFTWARE DEFINED NETWORKING (SDN) AND NETWORK FUNCTION VIRTUALIZATION (NFV) BY ENABLING VIRTUAL OLT (vOLT) OR DISTRIBUTED OLT.

THE SFP+ OLT MICROPLUG ALLOWS AN OPERATOR TO CREATE AN OLT SOLUTION AT REMOTE LOCATIONS WITHOUT ENVIRONMENTALLY CONTROLLED CABINETS. ALSO, IT'S UNIQUE ABILITY TO BE CONFIGURED TO OPERATE IN EITHER NG-PON2 OR 10G EPON NETWORK SIGNIFICANTLY LOWERS CAPEX/OPEX COSTS.

THE TIBIT MICROPLUG ENABLES SERVICE PROVIDERS TO QUICKLY DEPLOY HIGH-BANDWIDTH SERVICES IN AN AGILE, ELASTIC, AND DYNAMIC WAY.

THE TECHNOLOGY REQUIRES LESS SPACE AND POWER THAN ANY OTHER PRODUCT ON THE MARKET.

### APPLICATIONS

- PON OLT CONNECTIVITY FOR ETHERNET SWITCH PORTS
- OUTSIDE PLANT PON ACCESS BRIDGE CONNECTIVITY
- CABLE MSO CCAP PON CONNECTIVITY
- REMOTE DOCSIS PHY, WIRELESS BACKHAUL
- HIGH-BANDWIDTH BUSINESS PON CONNECTIVITY
- MDU-LOCATED PON BRIDGE, HIGH-DENSITY PON AGGREGATION
- DATA CENTER PON

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Part Number	Link Budget	Case Temp
TPUL-36N2011S-5CA0	Class N2/PR30/PRX30	0..70C
TPUL-36N1011S-5EA0	Class N1/PR20/PRX20	-20..75C