

- Free-standing or wall mount installation
- ITU-T G.9807.1 standards compliant
- 1G and 10G Ethernet RJ45 LAN interfaces
- Layer 2 / Layer 3 networking capabilities
- Low power consumption: <12 W



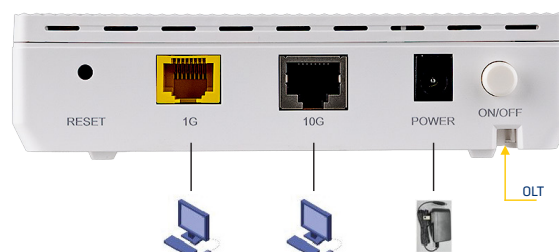
Overview

The Technetix Mira™ XB1201x is a compact 10G Optical Network Unit (ONU) for secure, high-speed FTTH deployments. Supporting multi-vendor OLT interoperability, high reliability and easy maintenance, it offers flexible deployment and simplified fiber service installation to residential and enterprise premises.

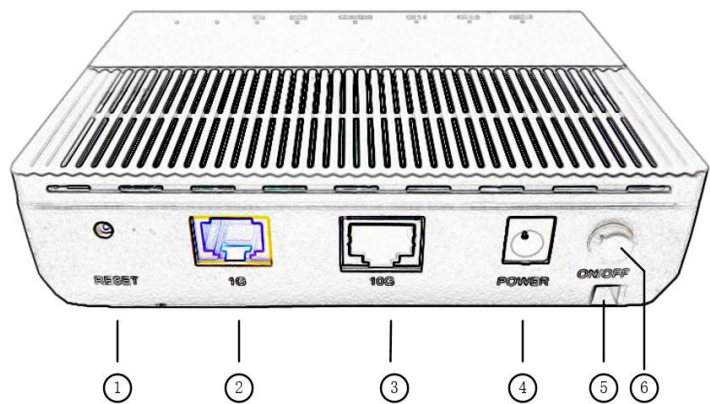
Solution display

A PON network typically includes an OLT at the service provider's end, and ONUs along with an Optical Distribution Network (ODN) at the user's end. Designed with a point-to-multipoint architecture, the ODN is built using single-mode optical fibers and passive optical components like splitters and connectors. This

setup forms the physical transmission path that seamlessly links the OLT to each ONU, enabling efficient and scalable deployment of FTTX (Fiber to the X) services.



Panel view diagram



Interface		Description
1	RST	Reset the ONT
2	1G	RJ45 10/100/1000M Base-T Ethernet interface
3	10G	RJ45 100/1000/2500M Base-T Ethernet interface
4	POWER	12 V/1 A, power input interface
5	PON	XGS-PON interface
6	ON/OFF	Power switch button

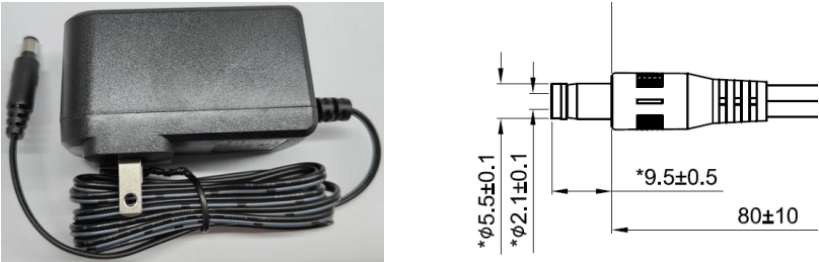
Operating status - LEDs

LED	Color	Indicates
PWR	Green/Solid	Normal
	OFF	No power
PON	OFF	Optical link is NOT OK (range: out of -8~-29 dbm)
	Green/Solid	Registered successful and active
LOS	Red	Optical link is NOT OK (range: out of -8~-29 dbm)
	OFF	Optical link is OK (range: in -8~-29 dbm); registered successful and active
Internet	Green/Solid	The WAN interface of the Internet is configured
	OFF	The Internet WAN interface is not configured or the Internet WAN interface is configured but does not take effect
LAN1G/ LAN10G	Green/Flash	Device connected
		Active or link data received/transferred (Green/Flash)
	OFF	Device not connected
		Link down

Plug-in units

The device uses a standard 5.5 x 2.1 x 9.5 mm (0.2" x 0.1" x 0.4") non-tuning fork DC head interface power adapter. Select an appropriate adapter for the power supply according to the device's energy consumption.

Electrical characteristics of the adapter are shown below:



Parameter	Power adapter
AC: Input	AC: 100~240 V; 50/60 Hz
DC: Output	DC: 12 V/1 A
Rated power	12 W

XGS-PON ONU device and performance specifications

Software

Parameter	Mira XB1201x
XGS-PON	ITU-T G.9807.1
	ITU-T G.988/TR255/TR156
	15 TCONTs/256GEM ports
	8 Egress queues per TCONT at least
	VLAN/priority/VEIP GEM mapping mode
	SN/LOID/SN + password authentication
	Performance monitoring: Eth/GEM port
	Dying gasp
Ethernet port	Ethernet port-based VLAN tags and tag removal
	MAC address learning
	10/100/1000/10000 Mbps auto negotiation
Layer 2 features	MAC learning (SVL)/aging
	Support max. frame length to 1518 bytes
	VLAN tagging for untagged packets
	Support VLAN 1-4094
Layer 3 features	PPPoE/Static IP/DHCP NAT/NAPT
	Port forwarding ALG, UPnP, DDNS
	IPv4/IPv6 dual-stack, DS-Lite static, and default routes
	Multiple services on one WAN port

Software

Parameter	Mira XB1201x
QoS	Support 8 queues with strict priority
	Ethernet port rate limitation
	802.1 priority
	SP/WRP
	Service flow classification
Multicast	IGMP v2 (RFC 2236) and IGMP v3 (RFC 3376)
	IGMP snooping and IGMP proxy
	MLD v1
Management	OMCI/WEB UI/TR069
	Telnet/SSH management with CLI commands
	Dual-system software backup and rollback

Hardware

Parameter	Mira XB1201x	Units	Notes
ONT type	SFU/HGU		
Interface	1x RJ45 (GE) + 1x RJ45 (10GE) + XGS-PON		
LED	POWER + PON/LOS + Internet + 1G + 10G		
CPU frequency	1 GHz dual-core		
Flash	128 MB NAND		
Memory	512 MB DDR3		
Module type	Class B+, SC/UPC		
Wavelength	Upstream 1270 nm / Downstream 1577 nm	nm	
TX optical power	5-9	dbm	
RX optical sensitivity	-28	dbm	
Transmission distance	0~20 km (0~12.4 mi)	km/mi	
Transmission rate	XGS-PON: Upstream 10 Gbps / Downstream 10 Gbps	Gbps	
LAN interface type	1G: RJ45 (10/100/1000 Mbps) 10G: RJ45 (1/2.5/5/10 Gbps)		

Mechanical and environmental specifications

Parameter	Mira XB1201x	Units	Notes
Power supply	12 V/1 A		
Power consumption	≤12	W	
Operating temperature	-5°C to +45°C (+23°F to +113°F)	°C/°F	
Storage temperature	-20°C to +70°C (-4°F to +158°F)	°C/°F	
Operating humidity	5-95% (non-condensing)	%	
Dimensions (H x W x D)	1.4"H x 5.3"W x 3.5"D (3.6H x 13.5W x 9.0D cm)	in/cm	
Weight	0.4 lb (0.2 kg)	lb/kg	

Order information

Item code	Model code	Description
19016193	Mira XB1201U	MIRA XGSPON ONU 1G+10G+UK POWER
19016161	Mira XB1201E	MIRA XGSPON ONU 1G+10G+EU POWER