

**FIBRAIN FB-1D****GPON ONT****1x10/100/1000Mbps Ethernet PoE PD (802.3af)**

- Optical WAN interface in GPON technology
- 1x 10/100/1000Mbps LAN interface with Auto MDI-MDIX
- Works in SFU (Layer 2) or HGU (Layer 3) mode
- Powered via PoE (IEEE802.3af) or from 12V AC/DC wall adapter
- Managed via Web/XML/OMCI
- Operates in the temperature range of 0 ~ 60 degrees Celsius
- Compatible with OLTs of all most popular manufacturers



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## Device description

FB-1D is an innovative product designed for operators of fiber optic broadband networks. Designed from the ground up with the end user in mind, it is easy to install in places where there is no direct access to a power outlet.

The device uses a single optical fiber to connect to the central device of the Internet provider. User connects to the device using a cat.5 (or higher) network cable. Device can be powered using one of two options: using PoE technology or using AC/DC adapter (included in package).

WAN interface is fully compliant with the ITU-T G984 standard. Hardware functionalities combined with the software installed in the device enable network traffic control at the L2 layer level (VLAN, QoS, IGMP Multicast) or network traffic termination at the L3 layer level (router/nat).

## Management

The device can be managed from the OLT device using the OMCI stack. An alternative method is configuration via an XML file (provisioning). The third method is configuration using the web interface. Such numerous configuration methods ensure seamless and quick integration with the network operator's systems and accelerate and facilitate the process of installing the device in the target location.

## Software features

### GPON

- ITU-T G.984 compliant
- ITU-T G.988 (OMCI Model)
- Dying gasp
- Dynamic bandwidth allocation
- AES Encryption of US/DS traffic
- Forward Error Correction (FEC)
- Support for 32 T-CONTs and 256 GEM Ports

### QoS

- Compliant with BBF TR-156
- Compliant with BBF 247 test
- Bandwidth limitation for incoming and outgoing traffic
- Packet classification based on COS, DSCP

### Multicast

#### L3

- IGMP Snooping
- IP HOST (management)
- PPPoE Client
- 802.1q
- DHCP Server/Client/Relay
- NAT & PAT
- DNS Relay
- IGMP Proxy i Snooping
- VPN Passthrough
- SNMP
- Port Forwarding
- UPnP
- Firewall
- IEEE 802.1D
- IEEE 802.1Q i IEEE 802.1P
- VLAN Translation
- VLAN Filter
- Up to 10 VLANs support
- Access | Trunk | Native port
- Storm-Control
- QinQ (Transparent and End-To-End)

#### L2



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### Hardware specification

<b>Flash memory</b>	64-128MB	<b>Storage temperatures</b>	-40~70°C
<b>WAN interface</b>	1 x GPON Port (SC/APC, BOSA) Class B+ Rx sensitivity -28dBm Rx overload -8dBm	<b>Humidity</b>	5~95 % (non-condensing)
<b>WAN speed</b>	GPON: 2,5Gbps/1,25Gbps (DS/US)	<b>Power</b>	12V/0.5 A / PoE 802.3af 48V
<b>LAN interface</b>	1 x port 10/100/1000BASE-T (RJ-45) Auto-speed detection, Auto-MDI/MDI-X	<b>Power consumption</b>	3 to 5 W
<b>LED</b>	POWER, PON, LOS, LAN	<b>Other interfaces</b>	Buttons: ON/OFF Reset
<b>Operation temperatures</b>	0 ~ 60°C	<b>Dimensions (W x D x H)</b>	115 mm x 115 mm x 31 mm



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