FiberXport®

OCG-1012m Single port Gigabit media converter

- Plug-and-play with FXP-100 wall-mount unit
- Fiber WAN port compliant with IEEE 802.3 Clause 59 (1000BASE-BX10-U)
- Transparent to all layer 3-7 network protocols (for example VLAN/QoS, VPN, PPPoE)
- Auto-sensing of fiber speed
- Remote monitoring via OAM

The OCG-1012m modular Single Port Gigabit Media Converter is part of the FiberXport® product family. Together with the FiberXport® wall-mount unit, it allows for an unmanaged data configuration in a single unit.

The OCG-1012m has been developed by Genexis to initiate Gigabit Ethernet services in a Fiber-to-the-Home (FTTH) network at lowest cost.

Broadband data port

The OCG-1012m features a single broadband data port. This port is autonegotiating on both data-rate and duplex mode. It also supports auto-MDI/MDI-X, so it can be connected to various Ethernet products by straight as well as cross UTP cable.

No configuration needed

Since all packets that enter the fiber port are transmitted transparently to the user port and vice versa, the OCG-1012m needs no configuration.

Due to a full layer 2 functionality, the OCG-1012m is fully transparent to all layer 3-7 network protocols. The OCG-1012m works seamlessly together with the IP-protocol (IPv4 and IPv6) and IP-features such as VLAN/QoS, VPN, IP ToS and DHCP.





Gigabit

100

Mbit

Features and specifications

User interfaces

1 User data port RJ-45 (LAN)

Status LEDs

- Power indication ወ
- Fiber uplink status: link / activity +
- 8 LAN-port - link / activity

WAN interface

- Compliant with IEEE 802.3 Clause 59 (1000BASE-BX10-U)
- Compatible with IEEE 802.3 Clause 58 (100BASE-BX10-U)
- Single mode fiber (ITU-T G.652)
- SC/PC connector
- Full duplex transmission
- TX 1260 1360 nm
- RX 1480 1580 nm
- 10 km range
- Class 1 laser product
- Transmit power -3 ... -9 dBm
- Receive power -3 ... -22 dBm
- Auto-sensing 100Mbit/1000Mbit LED indicator for link / activity of fiber inter-
- face

LAN ports

- Compliant with IEEE 802.3 Clause 40 (10/100/1000BASE-T)
- 1 RJ-45 connector
- Auto-negotiating half/full duplex
- If WAN speed is 1000 Mb, then LAN side advertises 1000 Mb only during speed negotiation process
- If WAN speed is 100 Mb, then LAN side advertises 100 Mb only during speed negotiation process
- 100 m range
- Line speed performance
- LED indicator for link and activity

Monitoring

- L2 management OAM (IEEE 802.3 Clause 57)

 - Discovery - Loopback

General specifications

Functional

- Transparent for all Layer 3-7 protocols
- VLAN-tagging (IEEE 802.1p/Q) allowed
- Jumbo frames up to 9k supported
- Flow control on WAN side not advertised for • 1000BASE-X fiber uplink and disabled for 100BASE-FX
- Flow control on LAN side advertised during negotiation

Mechanical and environmental

٠	Dimensions (H x W x D)	
	- OCG-1012m:	190x110x60 mm
	- Incl. FXP-100:	250x110x60 mm
٠	Weight	
	- OCG-1012m unit	180 g
	- Incl. FXP-100	350 g
٠	Power supply	5 Vdc ± 10%
٠	Power dissipation	
	- On-state (typical)	1.5 W*
٠	Operating condition	0 - 40 °C
٠	Storage condition	0 - 70 °C
٠	Humidity	10 - 85%

*50% below the European CoC on Energy Consumption target for 2014

Emission and safety regulations

- CE approved
- Safety: IEC EN 60950
- Laser safety:

- IEC EN 60825-1: Class 1 laser product - IEC EN 60825-2: Hazard level 1

- Emission: EN 55022, Class B
- Immunity: EN 55024

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