

# SIMPLICITY IN INSTALLATION AND SERVICE ACTIVATION.

**7973X / 7974X SERIES** | 1Gbps Active Ethernet | GPON



**FTTH NETWORKS**

# DATASHEET

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## INTRODUCTION

The small form factor, combined with ease of installation due to its click-on interface, makes our gateways an extremely flexible solution, with optimized handling and efficiency. The solution is built to allow the customer to perform the service activation. The combined solution for FTU and gateway services are formed in an extremely compact form factor, 88 x 88 x 65 mm, making it viewed by the customer as just another outlet.

## PRODUCT OVERVIEW

	<b>79734</b>	<b>79740</b>	<b>79741</b>	<b>79742</b>	<b>79753</b>	<b>79755</b>
<b>1Gbps WAN</b>	✓	*)	✓	✓	-	-
<b>GPON WAN</b>	-	-	-	-	✓	✓
<b>1 Gbps LAN</b>	1	-	4	4	1	4
<b>CATV</b>	-	✓	-	✓	**) )	**) )
<b>Switch Engine***</b>	✓	-	✓	✓	✓	✓
<b>CATV RF filter option</b>	-	-	-	-	**) )	**) )
<b>SFP WAN</b>	Fixed	-	Fixed	Fixed	Fixed	Fixed
<b>Fiber Connector</b>	SC/UPC	SC/APC	SC/UPC	SC/UPC + SC/APC	SC/APC	-
<b>WDM filter</b>	-	-	**) )	**) )	-	-
<b>Clickable FTU</b>	✓	✓	✓	✓	✓	✓
<b>TR-069</b>	✓	-	✓	✓	-	-

\*) Data port loop though, adapter SC/APC

\*\*) Option

\*\*) Support for VLANs, Q-in-Q, QoS, IGMP, Jumbo Frames and traffic shaping and manipulation

# HIGH LEVEL SPECIFICATION

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<b>HARDWARE</b>	<b>POWER CHARACTERISTICS</b>	<b>CATV</b>
100/1000 Base-BX-U auto sense WAN	Power supply: External 5VDC, 2A	The following is applicable for 79740/42:
The following is applicable for 79734:	Europlug, white color	1x RF-out F-connector (75 Ohm)
1x 10/100/1000 Base-T (RJ-45) LAN	Power dissipation: <4.5W typical	Optical wavelength: 1310 ... 1550 nm
The following is applicable for 79741/2:	<b>ENVIRONMENTAL SPECIFICATIONS</b>	Max optical input level: 0 dBm
4x 10/100/1000 Base-T (RJ-45) LAN	Operating temperature: 0°C to 40°C Max operating humidity: 85% RH (non-condensing)	Operational optical input level: -10 ... -3 dBm
<b>OPTICAL INTERFACE</b>	Storage temperature: 0°C to 70°C Max storage humidity: 95% RH (non-condensing)	RF bandwidth: 65 ... 1006 MHz
SMF ITU-T G.652	<b>PHYSICAL CHARACTERISTICS</b>	RF output: 84 dBuV
Optical Connector: SC/UPC	Operating temperature: 0°C to 40°C	RF flatness: <+/- 1dB
TX 1260 - 1360 nm	Dimensions (H x D x W): TBD x 88 x 88 mm	CNR: > 49 dB
RX 1480 - 1580 nm	Weight: <0.3kg	CSO: > 60 dB
15km range	<b>APPROVALS AND CERTIFICATIONS</b>	CTB: > 60 dB
Laser Class 1	CE marking	<b>STATUS LEDs</b>
<b>ETHERNET</b>	Safety EN 60950	WAN link/activity
Auto-negotiating full/half duplex	Emission: EN55022 Class B	LAN link/activity
Auto-MDI/MDIX	Immunity: EN55024	Power On
Layer 2 wire speed packet switching	<b>MANAGEMENT</b>	CATV (when applicable):
IEEE 802.1Q VLANs (4k VLANs) incl Q-in-Q	DKT OS based on Linux, provisioning via DHCP/TFTP	< -10 dBm (red) > -10dBm (green)
IEEE 802.1Q tag insertion and stripping	TELNET	
DHCP relay/Option 82	SSH	
4k MAC address database	SNMP v1/2/3	
Ingress and egress rate limiting	OAM as option supporting IEEE 802.3ah, Dying Gasp, Discovery and Loopback	
IGMP v1/2/3 snooping	TR-069, including support for TR-181	
Support for Jumbo Frames		
<b>QoS</b>		
IEEE 802.1p prioritization and reclassification		
4 QoS queues per port		
DSCP/ToS		

The device layout is based on a standard euro outlet form factor, customer perceives this unit as an outlet, not “yet another appliance in my house”. Analogy to power, CATV and telephony outlet, where the utility company and the operator make a clear demarcation point between the network and home installation. Comes as standard with 1x SC/UPC + 1x SC/APC, based on a none proprietary solution, can be adopted in environments with 3rd party equipment. Low power dissipation, supporting the recommendation of “Code of Conduct on Energy Consumption of Broadband Equipment”.