

PM720

EPON Multi-service Broadband Access ONU

Layer 2 Multi-Service ONU featuring CATV Overlay and PoE model options for various deployment scenarios.





About the Product

PM720 Series is a new generation smart ONU for integrated multiservice broadband access networks. PM720 Series, involving multiple models, supports common enterprise broadband access services and PoE service.

PM720 Series is complied with the international standard IEEE 802.3ah and YD/T 1475-2006 and China Telecom EPON Technical Requirement CTC



Key Features and Functions

Excellent Access Capacity

PM720 Series supports the PON transmission rate of symmetric uplink/downlink 1.25Gbps. Connected with PBN OLT, it can realize 1:64 splitting ratio. The maximum transmission distance is 20km from the OLT to ONT.

• Secure Service Carrying Ability

PM720 series is supplied with standard security features including VLAN, STP, ACL, QoS, security filtering and Broadcast Storm Control.

• High Service Control Capability

PM720 Series supports DBA and Rate-Limit. It supports advanced dynamic bandwidth distribution and accurate bandwidth limit, which enables users to share 1.25Gbps bandwidth resource appropriately. It also supports QoS function, which guarantees a reliable service quality and service priority.

Rich OAM Function

PM720 Series supports the standard OAM defined by China Telecom CTC2.1/3.0, including configuration, alarm, performance monitoring, fault isolation and security management, and it also supports private OAM defined by PBN.

- Advanced Energy-saving Technique
- Varied Application Scenarios

The PM720-004GP model supports PoE standards 802.af/at

PM720 Series supports the "GreenTouch" architecture

 The PM720-TV has an integrated RF receiver supporting CATV Overlav

Typical Application

PM720 is ideal for use in commercial and residential installations when value is a priority. The application diagram shows a typical hybrid HFC-FTTx scenario with CATV overlay utilizing PBN's AIMA3000.

Due to its extensive feature set, PM720 is very competitive in fiber-to-the-home and hospitality businesses where IPTV and security applications are used in a dense short-haul deployment. Integrated into a single management system, the entire HFC-FTTx environment is able to be monitored and provisioned by the operator from a single screen.

For the CATV overlay components, PBN's pizzabox EDFA and LTE product line can be used, instead of the larger AIMA3000 carriergrade RF headend solution, based on operator needs.

Headend Network Customer Premises Phrze Phrze Phrze Phrze Carv Corv C

Specifications

Standards	IEEE802.3ah PRC Community Industry Standard (YD/T 1475-2006) IEEE 802.1D, Spanning Tree IEEE 802.1Q, VLAN IEEE 802.1w, RSTP ITU-T Y.1291				
VLAN	4K VLAN Port based VLAN IEEE 802.1Q VLAN Tag/Transparent/Aggregation /Trunk/Translation mode VLAN CTC2.1/3.0 defined VLAN				
QoS	Backpressure flow control (half-duplex) IEEE 802.3x flow control (full duplex) Against Head of Line mechanism IEEE 802.1p, CoS Four priority queues on each port WR, SP and FIFO queue schedule algorithms Port rate limit SLA and DBA				
Management	Management modes including CLI, HTTP, SNMP and TELNET Software upgrade through TFTP and WEB, OAM, etc. Local or server syslog				
EPON Security	Triple-churning algorithm encryption; MAC/Loid/Hybrid authentication				
Network Security	MAC address number limit; MAC ACL, L2~4 IP ACL, Port protection, Port storm control				
Multicast	IGMP-Snooping CTC defined dynamic multicast function MLD-Snooping Multicast group limitation Multicast fast-leave				
Reliability	Loop detection; Dying-Gasp	o; TX/RX optical power alarm			
Service Interface					
	PM720-TV4F	PM720-004G	PM720-004GP		
PON ports	1 SC/APC	PM720-004G 1 SC/UPC	PM720-004GP 1 SC/UPC		
Ethernet ports	1 SC/APC	1 SC/UPC	1 SC/UPC		
Ethernet ports	1 SC/APC 1 GE + 3 FE TX	1 SC/UPC 4 GE TX	1 SC/UPC 4 GE PoE		
Ethernet ports RF Ports Optical power TX power RX sensitivity	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate DRAM (MB)	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate DRAM (MB) Flash (MB)	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate DRAM (MB) Flash (MB) MAC table	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128		
TX power	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate DRAM (MB) Flash (MB) MAC table VLAN ID Power Supply	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K		
Ethernet ports RF Ports Optical power TX power RX sensitivity System Capacity L2 Forwarding rate DRAM (MB) Flash (MB) MAC table VLAN ID	1 SC/APC 1 GE + 3 FE TX 1 x F-Type 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K 4K	1 SC/UPC 4 GE TX N/A 0 ~ 4 dBm <-27 dBm 1000 Mbps @ 1500 MTU 128 128 2K 4K	1 SC/UPC 4 GE PoE N/A 0 ~ 4 dBm < -27 dBm 1000 Mbps @ 1500 MTU 128 128 2K 4K		



Specifications

	PM720-TV4F	PM720-004G	PM720-004GP
Unit Dimensions (WxDxH mm)	200 x 150 x 38	130 x 100 x 28	170 x 98 x 28
Unit Weight (Kg)	0.3	0.2	0.6
Ship Dimensions (WxDxH mm)	290 x 202 x 54	256 x 114 x 46	250 x 230 x 55
Ship Weight (Kg)	0.5	0.3	0.8
Environmental Spe		0. 45%	0.45%
-	o ~ 45 C	0 ~ 45 C	0 ~ 45°C
Operating Temperature		0 ~ 45 C 10% ~ 85% (non-condensing)	0 ~ 45°C 10% ~ 85% (non-condensing)
Operating Temperature Operating Humidity	0 ~ 45 °C		
Environmental Spe Operating Temperature Operating Humidity Storage Temperature Storage Humidity	0 ~ 45°C 10% ~ 85% (non-condensing) -40 ~ 85°C 5% ~ 95%	10% ~ 85% (non-condensing) -40 ~ 85 °C 5% ~ 95%	10% ~ 85% (non-condensing) -40 ~ 85 C 5% ~ 95%
Operating Temperature Operating Humidity Storage Temperature	0 ~ 45 C 10% ~ 85% (non-condensing) -40 ~ 85 C	10% ~ 85% (non-condensing) -40 ~ 85°C	10% ~ 85% (non-condensing) -40 ~ 85°C
Operating Temperature Operating Humidity Storage Temperature	0 ~ 45°C 10% ~ 85% (non-condensing) -40 ~ 85°C 5% ~ 95%	10% ~ 85% (non-condensing) -40 ~ 85 °C 5% ~ 95%	10% ~ 85% (non-condensing) -40 ~ 85 C 5% ~ 95%

Order Details

PM720-TV4F-[XX]	FTTH/O ONU, 1 EPON port (SC/APC), 1GE+3FE TX ports, 1 RF interface (British Standard), plastic hull, AC220V external adaptor
PM720-004G-[XX]	FTTH/O ONU, 1 EPON port (SC/UPC), 4 GE TX ports, plastic hull, AC220V external adaptor
PM720-004GP-[XX]	FTTH/O ONU, 1 EPON port (SC/UPC), 4 GE TX ports, PoE, plastic hull, AC220V external adaptor

Options:

Power Adaptor Type XX

Power Adapter for China CN

Power Adapter for Europe (not for use in UK/CH)

Power Adapter for USA US

Module Lists

PM720-TV4F



- 1 SC/APC
- 1 GE + 3 FE TX 1 RF port

PM720-004G



- 1 SC/UPC
- 4 GE TX

PM720-004GP



- 1 SC/UPC
- 4 GE PoE