



## MXK GPON OLT Line Cards

### Industry-Leading OLT Port Density for GPON Networks

Zhone's MXK intelligent terabit access concentrator reflects a clean-sheet approach to truly scalable multi-service architecture, designed to meet the rapidly evolving demands on access networks. MXK platforms offer unmatched bandwidth – with non-blocking capacity of up to 3,600 100 Mbps GPON subscribers or 360 1 G Active Ethernet subscribers per chassis – while leveraging Zhone's well-proven SLMS access operating system for sophisticated service intelligence and ease of management.

The MXK line card includes several options for FTTx network design. Its ITU-standard GPON line card provides 2.5 Gbps downstream and 1.25 Gbps upstream bandwidth over a passive optical network on each of 8 ports per card. Using 64 splits per PON, the largest MXK platform can connect with up to 9,216 ONTs, the industry's highest OLT density.

GPON provides one of the most cost-effective ways for operators to deploy fibre-based services to the home, business, or node. With GPON splitters that can be co-located with at the CO or installed remotely in the network, the service provider can choose the network architecture that finds the right balance between capital cost optimisation and ease of upgradeability.

The MXK platforms' non-blocking architecture and intelligent processing enable GPON networks to deliver uncompromising quality for the full range of triple-play services.

Zhone's SLMS (Single Line Multi-Service) access operating system provides intelligent functionality across all the company's hardware products. Driven by 8 years of experience in commercial operation and collaboration with 700+ service providers worldwide, Zhone's SLMS software delivers functionality critical to today's access networks in advanced networking, quality of experience, triple-play, security, and management.

### Features and Benefits

- Unrivaled GPON port density with 8-port card – supports up to 9,216 ONTs per chassis
- ITU standard GPON
- Class B+ and Class C SFP optics
- Layer 2 and 3 features for guaranteed QoS, video replication, and security
- Fully standards-compliant Smart OMCI management of ONTs
- Industry-leading SLMS traffic management provides QoS, traffic shaping, and dynamic bandwidth allocation to support triple-play and other applications
- Full range of management options including SNMP, CLI, WebUI and integration into Zhone's ZMS Element Management System and OSS Gateway

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### Technical Specifications

<b>POWER</b>	Provided by MXK Chassis	
<b>INTERFACES</b>	8 GPON SC Interface (Front Panel)	
	8 SFP Ports (Front Panel)	
<b>STANDARDS SUPPORT</b>	Bridging 802.1D	
	VLAN 802.1Q with 802.1p	
	Multicast IGMP v2 and v3 (Snooping, proxy)	
	ITU G.984.1- 984.4	
	TU G.988	
	IEEE 802.3ah	
	IEEE 802.3ad LACP	
<b>MANAGEMENT</b>	DHCP Relay	
	ZMS (Zhone Management System) and OSS Gateway, including Smart OMCI for ONT management	
	Terminal for Command Line Interface (CLI)	
<b>BANDWIDTH/DISTANCE</b>	Built in Web UI	
	Downstream 2.488 Gbps/Upstream 1.244 Gbps	
	Class B+,C Optics (20 Km Max)	
<b>REGULATORY COMPLIANCE</b>	<b>Safety</b>	UL 60950-1; CSA 60950-1; EN 60950-1
	<b>Emissions</b>	EN 55022A; PART 15A (FCC)
	<b>Immunity</b>	GR-1089-CORE, Issue 3; SR-3580, Issue 1; ATT-TP-76200, Issue 14; VZ.TPR.9205, Issue 3
	<b>Environmental</b>	GR-63-CORE, Issue 3
<b>OPERATING REQUIREMENTS</b>	<b>Ambient Operating Temperature</b>	-40°C to 65°C
	<b>Non operating temperature</b>	-40°F to 158°F (-40°C to 70°C)
	<b>Humidity</b>	Up to 85%, non-condensing
	<b>Altitude</b>	-200 ft to 16,500 ft (-60 m to 5,000 m)

\*In process

### Ordering Information

PART NUMBER	DESCRIPTION
<b>GPON Line Cards</b>	
ZHN-MXK-GPONX8-IO3-5Y	MXK line card with 8 ports GPON SFP Optics (2.5 g Downstream/1.25 g Upstream) in each port
<b>GPON SFPs</b>	
ZHN-MXK-GPON-SFP-B+-RSSI	MXK GPON SFP B+ OPTICS, Supports Digital RSSI; USES SC/UPC Connector
ZHN-MXK-GPON-SFP-C+-RSSI	MXK GPON SFP C+ OPTICS, Supports Digital RSSI; USES SC/UPC Connector (REQ. SW 2.1.2XX or higher)

\*All OLT Cards ending in '-5Y' include 5 Year Support Plan. Please refer to Zhone/AFL Support Plan Document

## DASAN Zhone 5 Year Bronze Support Plan

PROGRAM DESCRIPTION	STANDARD 5 YEAR SUPPORT
<b>Zhone Telephone Assistance</b> 24/7 - For outage and "network down" Monday through Sunday 365 days per year  <b>AFL Telephone Assistance - Monday Through Friday</b> 9am - 5pm (AEST, UTC +10)	•
<b>Internet Technical Support Access</b> www.zhone.com/support Latest software and firmware updates Product release notes Documentation updates	•
<b>E-mail Notification</b> Customer can sign up via DZS web site to be automatically notified of major releases and related product bulletins	•
<b>Support for Minor Incidents</b> <b>Support Window AFL</b>  <b>Support Window Zhone</b> TAC Support Engineer Response Progress update (as required) Resolution Target	9am - 5pm (AEST, UTC +10)  5am - 4pm (PST, UTC -8) 1 business day 5 business days Next or future GA release
<b>Support for Major Incidents</b> <b>Support Window AFL</b>  <b>Support Window Zhone</b> TAC Support Engineer Response Progress update (as required) Resolution Target	9am - 5pm (AEST, UTC +10)  5am - 4pm (PST, UTC -8) 12 hours 3 business days Next maintenance release
<b>Support for Critical Incidents (Network down)</b> <b>Support Window AFL</b>  <b>Support Window Zhone</b> TAC Support Engineer Response Progress update (as required) Resolution Target	9am - 5pm (AEST, UTC+10)  24/7 1 hour 8 hours Next maintenance released

Applies to ONUs with Part Numbers ending in '-5Y', Chassis based OLTs and associated Uplink cards are included with the purchase of GPON line cards with Part Numbers ending in '-5Y'.