KOLT- 4704

4-port EPON Mini-OLT

Feature Summary
- 19" standard rack mountable
- 4 EPON ports, Two1GE SFP ports and two 1GE RJ45 ports

Field proven EPON Technology
- Complies with IEEE 802.3ah
- 1.25Gbps downstream & 1.25Gbps upstream
- Upto 1:64 optical splitting option per port
- Support port-based rate limitation and bandwidth control
- Support Dynamic Bandwidth Allocation (DBA)

High performance Layer 2+ switching
- IPv4
- Comprehensive VLAN and QoS support
- 4 K Mac address
- Support Vlan translation
- Support port isolation
- Support port rate limitation
- Support 802.1D Bridging and 802.1W RSTP;
- Access control list;
- IEEE802.x flow control;

Flexible SNI networking
- Upto 2 x 1GE (SFP+/SFP) ports
- 2 x 1GE (RJ45)(10/100/1000Mbps) ports

Carrier class operation & management
- Port Status monitoring and configuration management;
- Layer2 switch configuration such as VLAN, Trunk
- EPON management function: DBA,ONU authorization,
- Online configuration and management;

Security
- Layer 1 to 4 packet filtering (ACL)
- Broadcast/multicast/DLF packet limit

Powering
- Dual/Single AC power inputs

The KOLT-4704 EPON OLT supports four EPON OLT ports, Two 1GE SFP ports and Two 1GE ports RJ45 Ports. It is 1RU high and mounted in standard 19" racks or wider racks using adapters. The compact design, low power consumption, 99.99 Percent High Availability, extended operating temperature range and remote deployment where rack space is limited and ambient environment is harsh.

Applications

The KOLT-4704 serves many markets such as cable TV, small institution campus and small apartment complex networks, providing premium triple-play broadband access data, voice and video (IPTV & VoD) services. KOLT-4704 can also be deployed as backbone network infrastructure to carry mobile backhaul services. The high port density and energy efficiency allow service providers to save on both the equipment cost and the operation cost. At up to 64 optical splits, each KOLT-4704 supports up to 256 ONTs/ONUs. Multiple KOLT-4704 units can be networked together to serve much larger number of subscribers over shared uplinks.

Standards

The KOLT-4704 design takes advantages of the latest switching technologies. By complying with the IEEE 802.3ah EPON standards, the KOLT-4704 achieves interoperability with a wide range of EPON ONTs. The OLT can be connected to the ONT through G.652, G.655, G.657 SMF cables.

Flexible Management

The KOLT-4704 is managed with either KTPL Element Management System (KEMS) that supports auto-discovery of OLTs and ONUs/ONTs and provides configuration, profile based provisioning, event and fault management via its multiple Privileged CLI.

SPECIFICATIONS

EPON Interface

Ports:	4 SFP EPON ports
Standard:	Fully IEEE 802.3ah compliant
Line rate:	Downstream: 1.25 Gbps; Upstream: 1.25 Gbps
Connector:	SFP Plug-in module; SC/UPC on SFP
Link Budget:	-28 dB
Wavelength:	Transmit: 1310+/-20nm; Receive: 1490+/-10nm
Distance:	up to 20 km (subject to optical budget)
LLID:	Supports various LLID configuration

Ethernet Uplink Trunking Interfaces*

1GE:	2x SFP Optical ports; 802.3ab/802.3z
1GE:	2 x RJ45 ports; 802.3 / 802.3u / 802.3ab

Management Interfaces

Mode:	Supports both In-Band and Out-of-Band Management
Port:	1*10/100BASE-T out of band port, 1*CONSOLE

Switching

VLAN Models:	VLAN per customer Model and VLAN per Service Model with VLAN Translation as required.
Performance:	Full throughput non-blocking for all ports; 4K MACs; 4K VLANs.
Spanning Tree:	RSTP (802.1w)
VLAN Mapping:	untagged, single tagged, and VLAN transparent
Multicast:	IGMPv2 snooping, 256 IP Multicast Groups.
Forwarding:	IPv4
Mirroring:	SNI and PON port mirroring

Security

Protection:	Broadcast / Multicast / DLF packet limit
PON:	ONU Authentication, ONU Auto Registration & ONU Auto Discovery
ACLs:	Layer 1~4 Packet Filtering (ACL)

Quality of Service

Congestion:	Back pressure (802.3x Flow Control)
Scheduling:	SP, WRR, SP+WRR

Management

Local:	CLI via Consol port
Remote:	EMS, SNMP v1/v2c, Telnet, WEB
ONT/ONUs:	Managed via EMS, Telnet, WEB
Alarms:	Critical/ Major/Minor Severity; Alarm &Event logging, Local Alarm Storage, Syslog Logging
Time Sync:	NTPv4

Power

AC option:	AC: 90~264V, 47/63Hz; supports Redundancy.
Power:	25 Watts (Max)

Physical

Operating Temp:	-10ºC to 55 ºC
Storage Temp:	-40 ºC to 85 ºC
Humidity (N.C.):	5% to 95% RH
Rack:	19 inch ANSI/ETSI standard rack
Dimensions:	442mm (W) x 200mm (D) x 43.6mm (H)
Weight:	3.1Kg
LED Indicators:	Refer to User's guide
Reset Button:	Recessed push button on front
Cooling:	Forced Air Fan Cooling

** Contact KTPL Sales