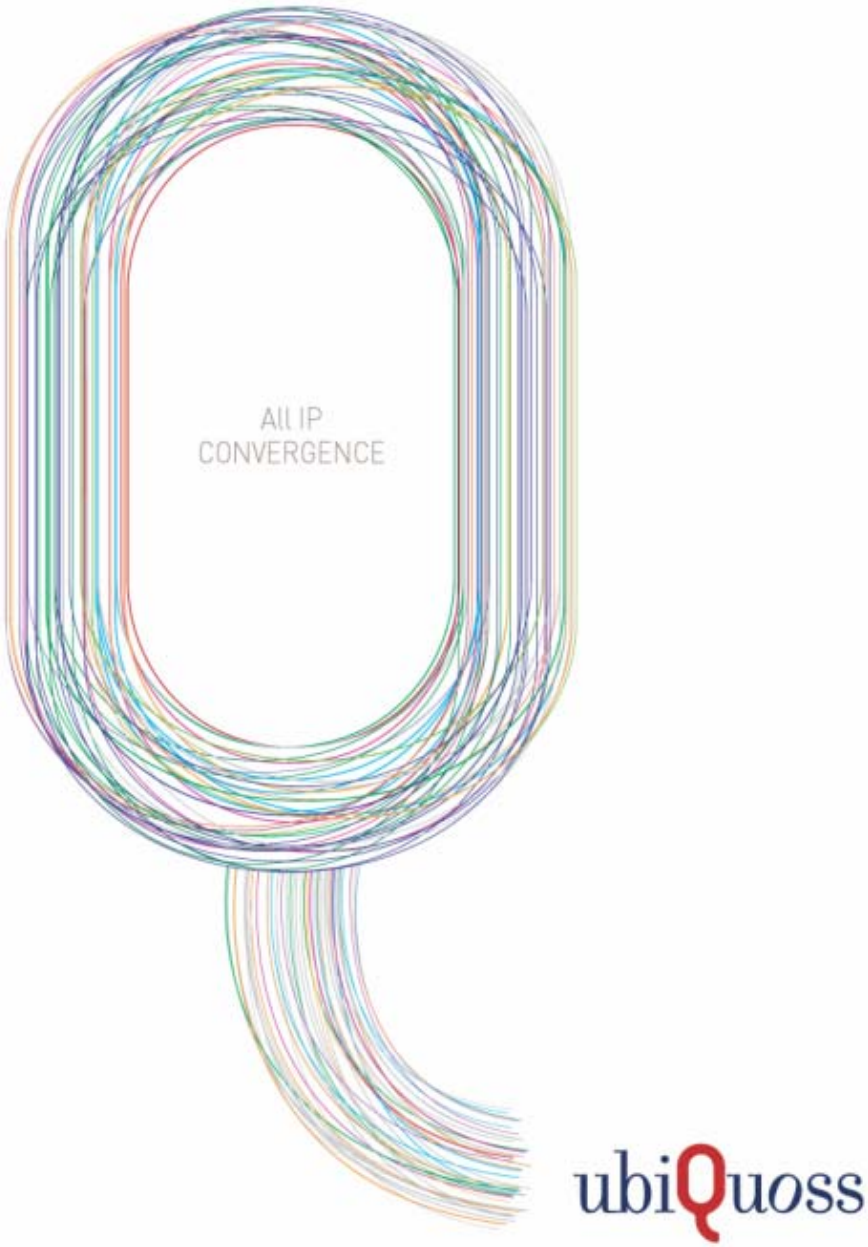
ubiQuoss Product

■ **Datasheet**



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48x10GE port L3-Switch

E6100

Overview

E6100 is a high density L3 switch having 48(Forty-eight) 10GBASE-R ports which is predictably cost effective. This pizzabox type switch is designed to be placed in Telco's Central Office or IDC/CDC to aggregate and distribute high bandwidth data traffic.

E6100 has got all the essential features of ubiQuoss' layer 3 software packages that can be found among our high profile L3 switches whereas meeting the basic requirement like the system reliability and software upgradability.

To meet the performance goal we adopted the most advanced solution that is available – Broadcom's Trident2 switching chipset. Besides based upon the compact design form factor, E6100 is operated with low power consumption and effective cooling airflow so that it can be suitably placed in packed environment.

Specification

Hardware Specification	
System Architecture & Console	48(Forty-eight) 1G/10GBASE-R ports: supporting SFP/SFP+ RS-232C Serial Port (RJ-45 type) 2 management ports(100Base-TX)
Memory	1GB Main Memory (up to 2GB) 1.258GB Flash Memory (256MB for OS + 2MB for Boot + 1GB NAND)
Physical Dimension	19" Rack Mount Type 44mm(H)x420mm(W)x450mm(D) Weight 10 Kg
Environment Conditions	
Power	AC and/or DC
Input power and frequency	100~240V ±10% (50/60Hz)
Power consumption	Max 185 W
Operating temperature	0℃ ~ +50℃
Storage temperature	-20℃ ~ +70℃
Performance	
Switching Fabric	960 Gbps non-blocking
Throughput	714 Mpps wire-speed Switching
IPv6	Enabled
L3 Function	
No. of IP Interface (MAX)	255
Hardware LPM (Longest Prefix Match)	Yes
Unicast Routing Protocol	Static, RIPv1/v2, OSPF, BGP, VRRP(w/ BFD)
No. of Route	Up to 128K (shared mode)
Distribute list/Route map)	Yes
Unicast Hello(RIP/OSPF)	Yes
ECMP(Equal Cost Multi Path)	Yes

Multicast Routing Protocol	PIM-SM/SSM, IGMP-Proxy
Redundant Protocol	VRRP
Hardware Policy Based Routing	Yes
IPv6 (Core Protocol)	Yes
DHCP	
DHCP Relay	Yes
DHCP Server	Yes
DHCP Snooping	Yes
Network Authentication	
802.1x	Yes
MAC Authentication	Yes
Dynamic VLAN	No
Local DB Authentication	Yes
Authentication Bypass	Yes
Hardware Access-List	
Max No. of Line	1.5K 48 Byte rules
L1 to L4 Control	Yes
Protocol Type Control	Yes
ToS Field Control	Yes
MPLS-TP	
LDP	DOD/DU, T-LDP
RSVP-TE	FRR supported
NHLFE	Yes
L2 VPN	VPWS (PWE3) and VPLS
L3 VPN	BGP-MPLS, 6PE, 6VPE
LSR	Label forwarding/swapping
LER	Yes
MPLS OAM	LSP Ping, Traceroute
QoS	
No. of Queue (Priority Class)	8 queues, CPU port support 48 queues
802.1P	Yes
ToS Priority Control	Yes
Strict Priority Control	Yes
WRR Priority Control	DWRR
Condition Based QoS	Yes
Bandwidth Guarantee per policy	Hardware - Yes; Software - No
Bandwidth Limit per policy	Yes
Data Center	
Data Center Bridge	Yes
802.1Qbb (PBFC)	Yes
802.1Qaz (ETS & DCBX)	Yes
TRILL	Yes
802.1Qau (CN)	Yes
802.1Qbg (EVB)	Yes
802.1Qbg (Bridge Port Extension) - Virtual Ethernet Port Aggregator (VEPA)	Yes
Bandwidth Control	
Rate Limiting	Yes (64K)
Rate Shaping	Yes (64K)
Multicast Filtering	
IGMP-Snooping	v1/v2
IGMP-Snooping proxy	Yes
IGMP Querier	Yes
MLD-Snooping	v1
Static Multicast Filter	Yes
Fast Leave	Yes
Flooding Control(Egress	Yes

Filtering)	
Flooding Limit	
Broadcast	Yes
Multicast	Yes
Unknown Unicast	Yes
L2 Redundancy	
802.3ad Link Aggregation	Yes (Static, LACP)
PVST / RPVST+	Yes
802.1D STP/RSTP	Yes
802.1Q MSTP	Yes
LLDP	Yes
Storm control	Yes
MAC limit	Yes
Mirroring	
Port Based Mirroring	Yes
Condition Based Mirroring	Yes
Management	
SNMP	v1/v2/v3
TRAP/syslog	Yes
RMON	Yes
netflow	Yes
Secure Shell(SSH) Server	SSHv1/v2
Console/Telnet Login	Yes
RADIUS Login	Yes
802.1ab LLDP	Yes
CLI	Yes
Others	
Jumbo Frame	Yes
Heat Resistant	Yes
Fanless	No
Log for blackout	Yes
Capacity	
MAC Address	Up to 32K~256K(Shared) MAC Management
VLAN	Up to 4,094 VLAN 802.1Q Tag Vlan Stacked VLAN Protocol VLAN Link Aggregation (802.3ad) : 13 group, Max 8 port/group
Services and Features	
Filtering, Security, QoS	IEEE 802.1p QoS, Diff-serv support Congestion Management Filtering : Mac address, Mac address Count limit, Netbios, NBT, DHCP, Broadcast Storm, Selective handling of specified IP address, IP Packet filtering, Detection of IP address collision, IP Sub-network range blocking Virus Filtering : DoS prevention, Warm virus Filtering Subscriber Traffic control by ACLs (Access Control Lists)
Bandwidth Management	Hardware-based Rate Limiting Rate Limiting : - 64Kbps per Ethernet port - 1Mbps per Gigabit port Egress Traffic Shaping per Port Ingress Traffic Policing per Flow/Packet Hardware Based Symmetric & Asymmetric Rate Limiting
Management	SNMP v1/v2, RMON, MIB-I/II Remote S/W Upgrade, Telnet, TFTP, FTP, Port Mirroring CLI, Syslog, Access level control for administrator, RADIUS
Functions	STP(802.1D), RSTP(802.1w)

	DHCP relay/DHCP snooping NTP (Network Time protocol) Client Jumbo Frame packet support : 9022byte Stacking & IP Clustering : Max 8 Stacking
Multicasting Protocol	IGMP v2.0, IGMP snooping, IGMP proxy-reporting
Standards	
IEEE Standards	802.1D Spanning Tree Protocol 802.1w RSTP 802.1p Priority Control 802.1Q VLAN 802.3 10Base-T Ethernet 802.3u 100Base-X Fast Ethernet 802.3x Flow Control 802.3ad Link Aggregation 802.3z 1000Base-X Gigabit Ethernet
IETF Standards	RFC 768 UDP RFC 791 IP RFC 903 TCP RFC 2131 DHCP Relay RFC 2236 IGMP v2 RFC 1112 IGMP
Management Standards & MIB	RFC 783 TFTP RFC 854 Telnet RFC 1157 SNMP v1 RFC 1213 MIB-I I RFC 1493 Bridge-MIB RFC 1757 RMON-MIB RFC 1902 SNMP v2 RFC 1907 SNMP-MIB RFC 1643 Ethernet-like Internet MIB