

Gigabit & 10 Giga Ethernet Switch

VPX 6U - L3+ IP Router

4340a

24 x 1Gbe & up to 4 x 10Gbe Ethernet ports with a full-wire speed switching capacity of 125 Mpps.

Layer2 Switching capabilities :

- 16K entries forwarding database
- Automatic or controlled learning and aging routing table
- Port and MAC access control
- Flow control and backpressure
- 10 KB Jumbo Frame
- IGMPv3 & MLDv2 snooping
- Rapid Reconfiguration 802.1w

Link aggregation static or LACP

Bandwidth management :

- Unicast & Multicast rate limiting
- Egress rate shaping with rate ranging port from 64K to 1Gbs
- Minimal bandwidth guarantee per traffic Class

VLANs services :

- 4K actives VLANs
- 4K Bridge multicast groups
- Flexible VLAN assignment 802.1Q port -based, protocol based 802.1v, service Vlans 802.1ad, Policy-based Vlans

Quality of Service engine :

- 8 priority queues per port
- Flexible bandwidth management with hierarchical shaping

Unicast and Multicast routing engine

RIPV2, OSPF V2 Routing proxy-ARP, DHCP relay

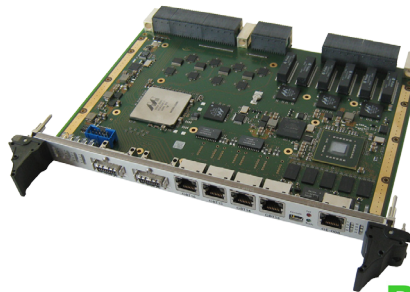
IPv6 capable

Security features :

- 802.1X Port authentication
- Multicast/Broadcast limiting
- STP/RSTP protocol
- Virtual cable tester On-Line

Flexible management tools :

- Web or CLI management
- SNMP (Standard & private MIBs)
- Enhanced Port mirroring
- Easy software updating



Description

Description

The **ComEth4340a** is built on the latest generation of Gigabit switch engine and PHY transceiver.

Its highly integrated chip combines in a single equipment a full layer 3 router with an optimized power consumption.

The **ComEth4340a** supports full-wire speed L2 bridging and L3 IPV4/V6 Unicast and Multicast routing with L2-L4 advanced traffic classification, filtering and prioritization. For instance, it can provide strict priority traffic and filtering needed for delay-sensitive or critical applications.

The **ComEth4340a** offers :

- 24 * 1000KX compliant ports routed on rear I/O (P2 & P3 connectors).
- 2 * 10GKX4 ports available on P1 rear connector.
- 2 * 10Gigabit ports available on the front panel (XAUI/10GB-CX4).

Thanks to software configuration, up to 16 * 1000KX ports can be used in 1000BT mode and routed on P5 & P6 connectors.

ComEth4340a models are also available with 4 * 1Gbe on the front panel (4 * 1000SX/LX fiber channels or 4 * 1000BT copper ports). In these configurations, 20 * 1000KX ports remain available on the backplane (12 of them configurable as 1000BT).

Management Capabilities :

The **ComEth4340a** can be monitored from a browser, a CLI or SNMP. The whole system can be easily managed and handled. A comprehensive Built-in test makes easier the maintenance of this switch. Many additional functions are provided on this full-managed version :

- Configuration of all the PHY and switch parameters, ports monitoring, static MAC address, QoS policy, Multicast and VLAN control, STP/RSTP protocols, MAC security
- Monitoring of all statistical counters and an extensive list of RMON counters

ComEth4340a is available in 6U 0.8" Pitch form factor, from Standard to Conduction-Cooled grade.

ComEth4340a

Gigabit & 10Giga Ethernet Switch - VPX 6U

Main features

Physical layer

24 1000KX ports (rear, P2/P3)
(16 of these 24 ports available on P5/P6 in 1000BT mode)
Two front XAU1/10Gig-CX4 ports
Two rear XAU1 ports (P1)
(Alternate : 4 fronts ports : Fiber or Copper).
Auto-Negotiation with Downshift
Automatic MDI/MDIX crossover for all 3 speeds of operation.
Automatic polarity correction.
Online virtual cable tester.
Optional fast Ethernet out of band management port

Layer 2 switching

802.1D/Q Compliant with a full-line rate Ethernet switching engine
16000 MAC address database
automatic or controlled aging and learning mechanism,
Tag extraction and insertion
(802.1p), Jumbo frames up to 10KBytes.
Back pressure for half-duplex, IEEE802.3x for full-duplex.
Discard broadcasts above critical threshold.
Link aggregation with static or dynamic LACP (7 trunks of 8 channels)
Enhanced port mirroring.
IGMP v2,v3 & MLD v2 snooping.

VLAN

802.1Q compliant : supports Layer 2 domain partitioning of up to 4000 active VLANs.
VLAN is flexibly programmed to any value from 1 to 4094 Protocol-based VLAN (802.1v) or Port-based VLAN (802.1v).

Security

Port and MAC access control compliant with 802.1X authentication.

L2/3 QoS

Eight queues per port.
Minimal and maximal bandwidth affectation per traffic class using weighted round robin and strict priority scheduling.
128 quality of services profiles for traffic class drop precedence

L3+ services

L3 Hardware Engine for Unicast and Multicast routing
IGMP V2, V3
RIP V2, OSPF V2
UDP relay & DHCP proxy
STP/RSTP provides redundant link support.
L2 to L7 advanced traffic classification

Switch Management

Onboard firmware is implemented with comprehensive Built-In Test (loop back mode used during the diagnostic), maintenance functions and network (BootP) updating functions.

Management software provides a wide range of configuration L2/3 functions on any port : transmission speed/mode, VLAN, STP parameters, mirroring, QoS, etc.

Supervision get lots of information in real time on the switch.
MIB, RMON counters and private informations are reachable from SNMP agent, web-browser and CLI for L3 functions.

This Open Application, named **SWITCHWARE**, is carried out by a PowerPC processor.

Rear Transition Module:

To be defined

Environnement Specifications:

Please consult the **ComEth4340a** page at www.interfaceconcept.com.

Ordering Information:

Please contact our sales department : tel. +33 (0)2 98 573 030 - email : info@interfaceconcept.com

Front panel LEDs

Power supply and Switch status
Switched ports : activity & link

Power supply

Estimated Pmax = 30W (for 24 1000KX and 4 XAU1) TBC
5 VDC only
3.3 VDC Aux for optionnal management controller.

Standard Conformance

Emissions

EN55022 Class B

Immunity

CEI 6000-4-2 (ESD), 6000-4-3 (Electric field), 6000-4-4 (Burst), 6000-4-5 (Surge), 6000-4-6.

Security

EN60950

