

# IC-SR-BOXa

## 19" 1/10 Gigabit Ethernet Switch

- 19" rack mountable
- Extended and Rugged versions
- Managed Layer 2+/3 switch
- Up to 32 ports
- 1000BASE-T, SFP+



## Overview

The **IC-SR-BOXa** is based on the Interface Concept **Co-mEth4000e** Layer 2/3 1/10 Gigabit Ethernet switch into a 19" rack mountable box. The **IC-SR-BOXa** is dedicated to industrial and military networking applications.

A rugged version for harsh environment demanding applications will also be available (see below).

## Description

Powered by a state-of-the-art highly integrated Marvell system-on-chip (SoC) with programmable packet processors, the **IC-SR-BOXa** provides up to 32 Ethernet ports.

The **IC-SR-BOXa** standard version integrates a 110/240 VAC 50/60Hz power supply. It can also be powered by a 18-36 VDC power supply unit on request. The switch is cooled by controlled internal fans.

The **IC-SR-BOXa** matrix coupled with an independent management processor is controlled by the Switchware, the field-proven Interface Concept network management application. The Switchware supports a wide range of Ethernet protocols and has an easy to use Graphical User Interface (GUI).

## Ethernet interfaces

### Standard configurations:

- 16 \* 1000BASE-T ports
- 8 \* SFP+ ports

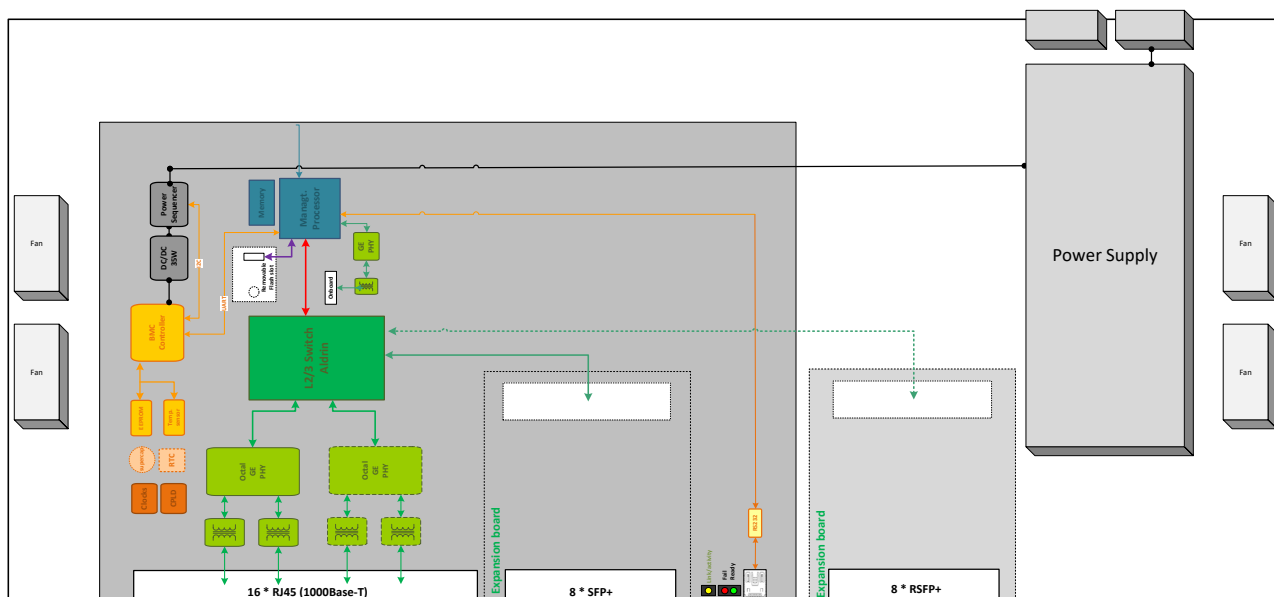
Option: 8 additional SFP+ ports can be provided.

Other configurations possible, please consult us.

# IC-SR-BOXa

19" 1/10/40 Gigabit Ethernet Switch

## Block Diagram



## Main features

### Layer 1/2

- Speed, duplex, auto-negotiation, flow control and power management on all ports
- VLAN support / 802.1Q tagging
- Port mirroring
- Port rights management
- Static MAC address list
- Static IPM address list
- Port static authentication
- IEEE 802.1X authentication
- Ingress filtering
- Storm prevention
- QoS on all ports
- Ingress / egress access lists
- Rate limiting
- QoS remarking
- Static trunking / LACP
- STP / RSTP
- IGMP/MLD snooping

### Security management

- Login/password, key or certificate authentication
- Secure switch management by HTTPS, SSH or SNMPv3
- 802.1X port-based authentication

### QoS

- Layer 2 802.1p User Priority tagging
- Layer 3 IP DSCP (Diffsev)
- Access Control Lists (L2, L3, L4)

### Multicast

- IGMP snooping (v1, v2, v3)
- MLD snooping (v1, v2)

### Layer3

- ICMP
- Proxy-ARP
- DHCP-relay
- NAT
- IPv4 routing (unicast/multicast)
- Static IP routing (unicast and multicast)
- RIPv1, RIPv2 (IPv4)
- RIPng(IPv6)
- OSPFv2 (IPv4) / OSPFv3(IPv6)

### Others

- PBIT results
- Temperature information
- CPU load
- Switch state
- Global and detailed ports statistics
- VLANs statistics
- Bridge egress, ingress and RMON statistics
- Ingress and egress access lists statistics
- Rate limiting statistics
- Queues and ingress buffers counters
- IGMP snooping state by VLAN and by port
- MAC address table access
- IPM address table access
- STP/RTSP state
- IEEE 1588 (PTP)

## Switch management

The **Switchware** is a comprehensive switch management stack running on Interface Concept's Ethernet switch product line. It is running on the **IC-SR-BOXa** on-board processor and supports a rich set of Layer 2/3 features controlled through the following interfaces:

- Graphical User Interface (GUI)
- Command Line Interface (CLI)
- SNMP (v2c or v3)

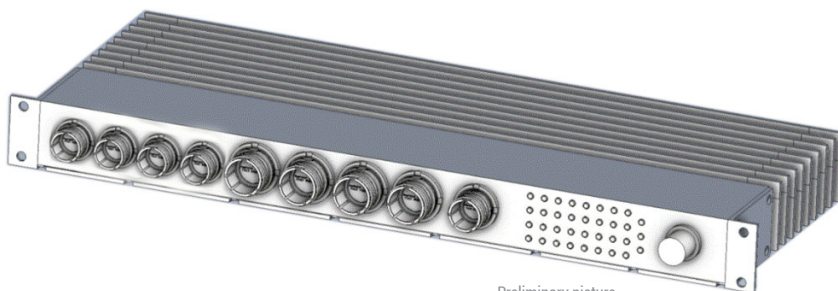
Please consult the **Switchware** User's Manual for a comprehensive overview of all the product features.

A version of the **Switchware** (v8.0) will enrich the product's security functions: implementation of the Secure Boot, **Switchware** update with signed/encrypted files shared with the user, possibility to limit updates only those signed by the user (option), multiple fully secured Administrator/Operator accounts, storage of salted and hashed passwords only, encrypted files/partitions for configuration and log data.

It will also allow activation of a FIPS140-2 mode (use limited to the only FIPS140-2 validated Secure protocols, cryptography and encrypted hash formats) and will target an European Security Visas.

### ComEth4000e Rugged Box version

Based on the same Ethernet switch, a fanless rugged version of this 32 ports' switch will be soon available.



Preliminary picture

It will provide :

- 4 \* MIL38999 optical connectors, each providing 4 \* 1/10g 850nm optical interfaces (option possible : 1310nm allowing up to 10km links)
- 4 \* MIL38999 copper connectors, each providing 4 \* BASE-T interfaces
- 1 \* PSU 28 VDC (with holdup capacity option)

For more information, please contact:



3, rue Félix Le Dantec  
29000 QUIMPER  
Tel. +33 (0)2 98 57 30 30  
Fax. +33 (0)2 98 57 30 00  
info@interfaceconcept.com