

# XChange3030

3U VPX 40G Ethernet Switch with Layer 2 Switching and Optional Layer 3 Routing

- › Non-blocking, full wire-speed Ethernet switch
- › Layer 2 switching with extensive IEEE protocol and IETF RFC support
- › Layer 3 routing when paired with the XChange6300 Cisco IOS-XE® Gigabit Ethernet Embedded Services Router (optional)
- › Six 40GBASE-KR4 Gigabit Ethernet ports
- › Six 10GBASE-KR Gigabit Ethernet ports
- › Two 10GBASE-T Gigabit Ethernet ports
- › One front panel optical Ethernet port
- › Ruggedized Enhanced Design Implementation (REDI) per VITA 48
- › Conduction cooling
- › IPv4 and IPv6 support
- › Support for jumbo frames up to 10 kB
- › IEEE 1588v2 transparent clocking support
- › SSH and SNMP server support
- › XMC site (optional)
- › VITA 46.11 Tier 1 and Tier 2 IPMI Controller (IPMC) (optional)



## XChange3030

The XChange3030 is a conduction-cooled 3U VPX Ethernet switch module. The XChange3030 provides six backplane 40GBASE-KR4 Ethernet ports, six backplane 10GBASE-KR Ethernet ports, two backplane 10GBASE-T Ethernet ports, and one front panel optical Ethernet port.

The XChange3030 delivers full wire-speed across all of its ports and supports jumbo frames up to 10 kB. It also supports IPv6 and a comprehensive set of IETF RFCs and IEEE protocols.

As a fully managed Layer 2 switch, the XChange3030 supports features such as VLANs (IEEE 802.1Q), LACP, STP, RSTP, PVRST, MSTP, SNMP, flow control, port mirroring, port authentication (IEEE 802.1x), Quality of Service (QoS), ACL, IGMP, and LLDP.

The XChange3030 can also optionally host an XChange6300 Cisco IOS-XE® Gigabit Ethernet Embedded Services Router.

# X-ES

Extreme Engineering Solutions

*“Fast, Flexible, Customer-Focused  
Embedded Solutions”*

### Extreme Engineering Solutions

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**Ethernet**

- Six 40GBASE-KR4 Ethernet ports (can be configured as 24 10GBASE-KR)
- Six 10GBASE-KR Ethernet ports
- Two 10GBASE-T Ethernet ports
- One front panel optical Ethernet port
- IPv4 and IPv6 support
- Support for jumbo frames up to 10 kB
- Non-blocking, full wire-speed
- IEEE 1588v2 transparent clocking support

**Ethernet Management Features**

- Layer 2 switching (including VLANs)
- Extensive IEEE protocol and IETF RFC support
- Configuration through CLI or SNMP
- 4 MB packet buffer

**XMC (Optional)**

- One XMC site (available on configurations with integrated mezzanine card)
- One RS-232 serial port from J16 to P1
- One 2500BASE-X Ethernet port, and two 1000BASE-X Ethernet ports from J16 connect to XChange3030 when paired with XChange6300 Embedded Services Router

**Additional Features**

- VITA 46.11 Tier 1 and Tier 2 IPMI Controller (IPMC) (optional)

**Physical Characteristics**

- 3U VPX form factor
- Dimensions: 100 mm x 160 mm
- 0.8 in. or 1.0 in. pitch
- Compliant to the VITA 48.2 Type 1, Two-Level Maintenance (2LM) standard (optional, contact X-ES for details)

**Environmental Requirements**

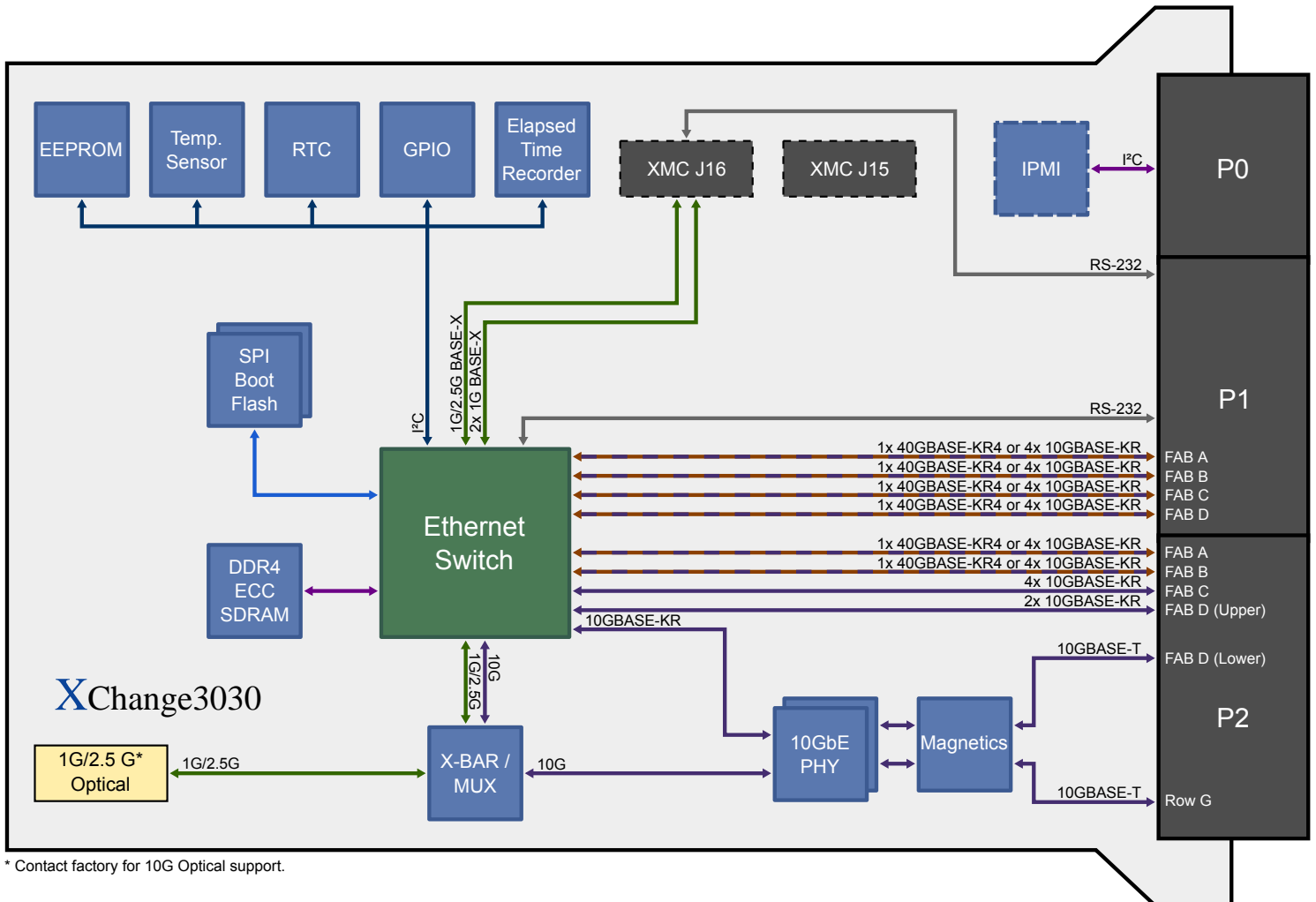
Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 5
- Conformal coating available as an ordering option

**Power Requirements**

- Power will vary based on configuration and usage. Please consult factory.

<b>Ruggedization Level</b>	<b>Level 5</b>
<b>Cooling Method</b>	Conduction-Cooled
<b>Operating Temperature</b>	-40 to +85°C (board rail surface)
<b>Storage Temperature</b>	-55 to +105°C (maximum)
<b>Vibration</b>	0.1 g <sup>2</sup> /Hz (maximum), 5 to 2000 Hz
<b>Shock</b>	40 g, 11 ms sawtooth
<b>Humidity</b>	Up to 95% non-condensing



\* Contact factory for 10G Optical support.