

# AIRES 16x GbE RUGGED SWITCH

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## AIRES1600PDC0C4STD

- ▶ rugged, IP67 sealed system
- ▶ small form factor (2.0" H x 6.5" D x 8.5" W) and low power
- ▶ 16x GbE ports with four ports per connector
- ▶ +28VDC power input for vehicle or aircraft
- ▶ -40C° to +71C° wide temperature range



# AIRES 16x GbE RUGGED SWITCH

The AIRES product family extends Kontron's existing Ethernet switch portfolio and features a fully managed Layer 2/3 Gigabit Ethernet switch offering IPv4/IPv6 routing and full management capabilities. It supports a powerful set of CLI, Telnet, Web and SNMP management interfaces to configure the entire set of protocols and parameters including Layer 2 and Layer 3 (IPv4/IPv6) protocols, Multicasting, QoS and Security. The AIRES is uniquely designed and tested to survive in harsh and extreme environments conditions found in military, avionics, commercial avionics, mining, smart grid, homeland security, transportation (rail), and oil & gas markets.

## UNIQUE VERSATILITY

A combination of port count, connector type, and power supply options ensure the highest connectivity and operational capability. The AIRES product family is available in many different front I/O versions and power supply options. The AIRES1600PDCOT1STD provides 16x GbE direct port connections using small and rugged connector solutions.

## ROBUST AND RELIABLE

The rugged design, selection of high temperature components along with an optimized thermal solution ensures high product reliability. The AIRES product family is able to handle the toughest environmental conditions.

## LONG-TERM AVAILABILITY

Based on chosen components from embedded roadmaps, the AIRES ensures long-term availability and therefore eliminates the risk of unplanned design changes and unexpected application modification.

## KEY FEATURES OF AIRES1600PDCOT1STD

- ▶ Fully managed Layer 2 / 3 non blocking Ethernet Switch, IPv6 support
- ▶ 16x Port Connectors 10/100/1000BASE-T
- ▶ SNMP, command line and web management interface
- ▶ Small Form Factor & Low Power, 1.75"H x 6.5"D x 8.5"W
- ▶ +28VDC power input for vehicle or aircraft

## TECHNICAL INFORMATION

<b>CONTROLLER AND SWITCH</b>	Broadcom BCM56333 or BCM56334 Ethernet switch PowerPC® 405EX, 32-bit, RISC processor core operating up to 600 MHz NXP LPC2368 32-bit microcontroller 512MB DDR2 RAM 200 MHz 1GB NAND Flash for file storage
<b>SOFTWARE MANAGEMENT</b>	Management via SNMP, Telnet, CLI - In-band - Out-of-band via Ethernet or RS232 Reliable software, field upgradable, Dual boot images with roll-back capabilities, Advanced management monitoring features
<b>SOFTWARE SWITCHING &amp; ROUTING</b>	Ethernet Bridging: - Static and dynamic link aggregation, Classic, rapid and multiple spanning tree algorithms, Quality Of Service, Full Duplex operation and flow control, Layer 2 multicast services, VLAN support, Access Control Lists IP Routing: - IPv4 Forwarding, ARP, ICMP, static routing, OSPF and RIP routing, Virtual router redundancy protocol (VRRP), ECMP Equal Cost Multipath routing Multicast: - IP Multicasting, IGMPv2 /v3, PIM-DM/PM, DVMRP, MLD v1/v2, IGMP and MLP snooping Services: - SNMP client, DHCP server, Event Management, POST, SNMP, Support for multiple configurations, TFTP server, Power on and diagnostic tests
<b>POWER INPUT</b>	Integrated +28VDC input (+18VDC to +36VDC) power supply and EMI filtering supports MIL-STD-704, MIL-STD-461 and D0160, Optional External wide range AC power supply available for development
<b>POWER CONSUMPTION</b>	Less than 25W
<b>OPERATING TEMPERATURE</b>	-40C° to +71C°
<b>SHOCK</b>	40g, 11ms sawtooth
<b>VIBRATION</b>	5 Hz to 2000 Hz, Random, 1hr each axis, 8.21 GRMS Power Spectrum Density
<b>EMI/RFI</b>	FCC Part 15, RTCA/DO-160, MIL-STD-461, IEC 61000
<b>HUMIDITY</b>	95% non-condensing
<b>SIZE</b>	2.0" (51mm) H x 6.5" (165mm) D x 8.5" (216mm) W
<b>WEIGHT</b>	3.9lbs (1.7kg)
<b>CONNECTOR</b>	Military Circular locking connector IP67 rated. J3 - J6 55pin for 4x GbE ports per connector

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