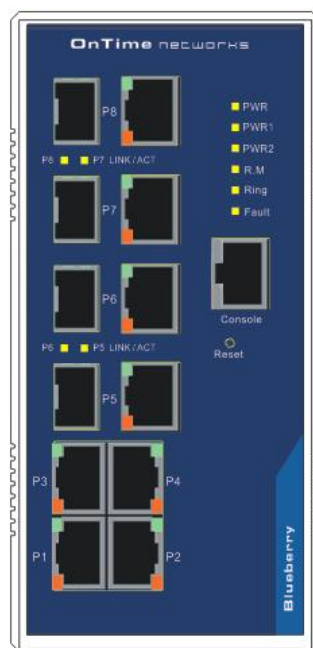




## Blueberry 8 port managed Industrial gigabit Ethernet switch, BM-1600 series

### Features

- 4 x 10/100/1000BASE-TX ports
- 4 x 10/100/1000BASE-X combo ports
- Network redundancy: OnTime-Ring- or MSTP/RSTP/STP protocol
- Network management: Web, telnet, CLI and SNMP v1/v2/v3 with RMON
- Multicast filtering: IGMP snooping
- IEEE802.1Q VLAN
- Event notification: through Syslog, Email, and SNMP trap
- Wide operating temperature: [-40°C..70°C]
- Triple redundant DC power input
- Mounting: DIN-Rail



The switches in the BM-1600 series offer full management based on HTTP, telnet, CLI, SNMP or the Windows Open Vision software application. Network Redundancy is achieved based on the OnTime-Ring- (recovery time < 10ms over 250 units of connection) or MSTP/RSTP/STP (IEEE 802.1s/w/D) protocol. The switch is designed for industrial environments and offers a wide operating temperature range, [-40°C..70°C]. Up to four SFPs of the following types can be installed in the four SFP cages:

1000BASE-SX, 1000Mbps, multi-mode (850nm) LC connector – 550m

1000BASE-LX, 1000Mbps, single-mode (1310nm) LC connector – 10km

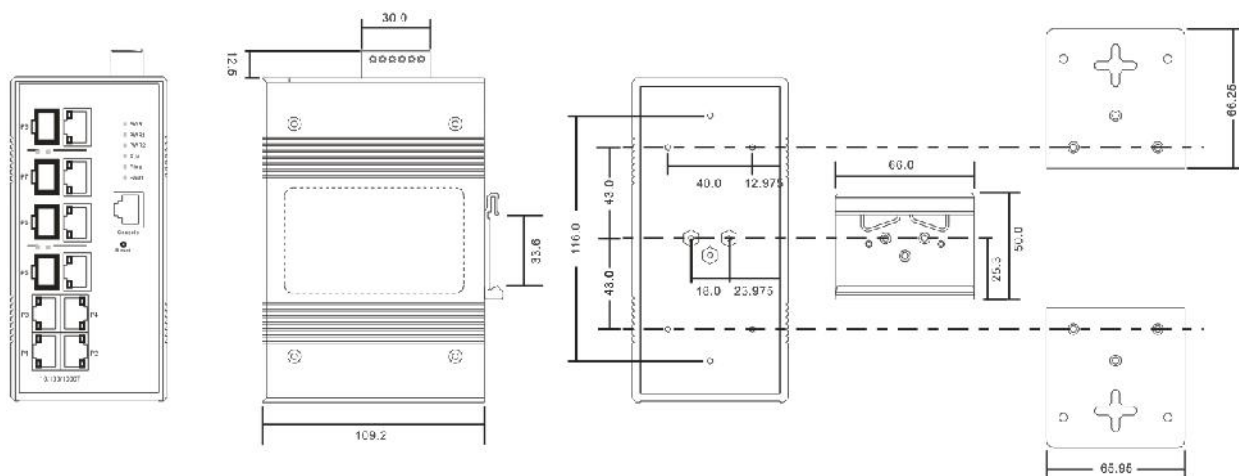
Other SFPs including BIDI fiber transceivers for other fiber lengths are available on request.

The unit supports multicast filtering (IGMP snooping), IEEE802.1Q VLAN and Event notification, through Syslog, Email, and SNMP trap.

The BM-1600 further features triple redundant DC power inputs, DIN-Rail Mounting and comes in an IP30 Aluminum case.



## Dimensions



## Specifications

Ethernet ports	
<b>10/100/1000 BASE-TX ports in RJ45</b>	4-8
<b>Auto MDI/MDIX</b>	
<b>1000BASE-X SFP slots</b>	4
Technology	
<b>Ethernet standards</b>	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1X for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
<b>MAC table</b>	8192 MAC addresses
<b>Priority queues</b>	4
<b>Switch properties</b>	Store-and-forward and full wire speed on all ports
<b>Security Features</b>	Enable/disable ports, MAC based port security





**BLUEBERRY**  
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ETHERNET



**BM-1600 SERIES**

	<p>Port based network access control (802.1x) VLAN (802.1Q ) to segregate and secure network traffic Radius centralized password management SNMPv3 encrypted authentication and access security</p>
<b>Network redundancy</b>	<p>OnTime-Ring STP RSTP MSTP</p>
<b>Management</b>	HTTP, telnet, CLI and SNMP v1/v2/v3 or Windows Open Vision
<b>Other protocols</b>	<p>IGMP snooping (up to 1024 multicast filters) Port rate limiting TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP Port configuration, status, statistics, monitoring, security</p>
<b>RS232 console port</b>	RS-232 in RJ45 connector with console cable. Baud rate setting: 9600bps, 8, N, 1
<b>LEDs</b>	
<b>Power</b>	Green : Power LED x 2, Indicate power input
<b>10/100/1000BASE-TX RJ45 ports</b>	Green for port Link/Act. Amber for Duplex/Collision
<b>Fiber port indicators</b>	Green for port Link/Act.
<b>Ring Master</b>	<p>Light on for system ready Blinking for system ready and Ring master mode Light off for system failed</p>
<b>OnTime-Ring</b>	Green : Indicate port operated in OnTime-Ring mode
<b>Fault</b>	Amber: Indicate power fault or other failure
<b>Fault relay</b>	
<b>Relay</b>	Relay output to carry capacity of 1A at 24VDC
<b>Power</b>	
<b>Redundant Input Power</b>	Dual DC inputs. 12-48VDC on 6-pin terminal block
<b>Power Consumption (Typ.)</b>	24 Watts
<b>Overload Current Protection</b>	Yes
<b>Reverse Polarity Protection</b>	Yes
<b>Physical Characteristic</b>	
<b>Enclosure</b>	IP30, Aluminum case
<b>Dimension (W x D x H)</b>	74.3(W) x 109.2(D) x 153.6(H) mm (2.93 x 4.3 x 6.05 inch.)
<b>Weight (g)</b>	1075g
<b>Installation</b>	DIN rail mounting
<b>Environmental</b>	
<b>Storage Temperature</b>	-40 to 85°C (-40 to 185°F)
<b>Operating Temperature</b>	-40 to 70°C (-40 to 158°F)





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INDUSTRIAL  
ETHERNET**



**BM-1600 SERIES**

<b>Operating Humidity</b>	5% to 95% Non-condensing
<b>Approvals</b>	
<b>EMI</b>	FCC Part 15, CISPR (EN55022) class A
<b>EMS</b>	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
<b>Shock</b>	IEC60068-2-27
<b>Free fall</b>	IEC60068-2-32
<b>Vibration</b>	IEC60068-2-6
<b>Safety</b>	EN60950
<b>Warranty</b>	5 years

## Ordering information

Product	
<b>BM-1608FC0</b>	Managed industrial Ethernet switch with 8 x 10/100/1000BASE-TX (RJ-45) + 4 x SFP combo ports
<b>BM-1608FC1-SX</b>	Managed industrial Ethernet switch with 7 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 1x 1000BASE-SX-550m (LC)
<b>BM-1608FC2-SX</b>	Managed industrial Ethernet switch with 6 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 2x 1000BASE-SX-550m (LC)
<b>BM-1608FC3-SX</b>	Managed industrial Ethernet switch with 5 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 3x 1000BASE-SX-550m (LC)
<b>BM-1608FC4-SX</b>	Managed industrial Ethernet switch with 4 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 4x 1000BASE-SX-550m (LC)
<b>BM-1608FC1-LX</b>	Managed industrial Ethernet switch with 7 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 1x 1000BASE-LX-10km (LC)
<b>BM-1608FC2-LX</b>	Managed industrial Ethernet switch with 6 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 2x 1000BASE-LX-10km (LC)
<b>BM-1608FC3-LX</b>	Managed industrial Ethernet switch with 5 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 3x 1000BASE-LX-10km (LC)
<b>BM-1608FC4-LX</b>	Managed industrial Ethernet switch with 4 x 10/100/1000BASE- (RJ-45) + 4 x SFP combo ports + 4x 1000BASE-LX-10km (LC)

