

INDUSTRIAL ETHERNET

Gateway



Connecting Opteon Imaging and Control Components to Industrial Ethernet Networks

Opteon's Industrial Ethernet Gateway facilitates the communication of systems incorporating multiple Opteon devices with a variety of Industrial Ethernet networks. Features include:

SureSync™ Event Communication

Transmissions to and from the Industrial Ethernet Gateway include the time of each event along with the payload so that decisions can be taken in non-realtime portions of a system, yet their implications realized in the realtime portions of the system at precisely the right time and conditions.

Realtime Communication

Rapid delivery and receipt of information at each PLC's maximum rate in the PLC's own native protocol.

Remote Signaling

Cabling density rises exponentially with machine complexity. Each cable costs money, is a point of failure, delays communication, and is an antenna for any noise in the system frequently resulting in spurious or missing triggers. In an Opteon PoE GigE system, there are no power cables and the Cat 5e or Cat 6 communication cable is shielded so there are no emissions. All communications are encoded with CRC checks and are always acknowledged by receivers so even in the noisiest of environments nothing is ever lost or missed.

Parts Tracking

Using the optional Programmable Logic Controller, deep, parallel hardware structures are matched with language elements that make it straightforward and reliable to track parts at high speed through multi-lane, multi-stage, processing and inspection.



Product Highlights

- Supports all major industrial Ethernet protocols:
 - Ethernet/IP Adapter
 - EtherCAT Slave
 - Open Modbus/TCP
 - Powerlink
 - Profinet IO-RT Device
 - Sercos Slave
 - Varan Client
- Optional integrated programmable logic controller with 1 μ s scan time
- CRC checks and handshaking guarantee Noise immunity
 - No false triggers
 - No missed triggers
- No power cabling required

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General Specifications

Power

IEEE 802.3af/at Power Over Ethernet	42 - 56 VDC
Supply Current	50 mA

Environmental Specifications

Acceleration	15 G
Shock	70 G
Thermal operating range (<i>Case</i>)	-30 to 50 °C
Thermal storage range (<i>Ambient</i>)	-60 to 85 °C
Humidity	0 - 95% NC
Weight	200 gm

Interfaces

Ethernet:

Opteon (w/PoE)	1000BaseT
Industrial Ethernet	Port 0 10/100BaseT
Industrial Ethernet	Port 1 10/100BaseT

Event Communications

Ethernet TX Ports (<i>16 byte payload</i>)	8
Ethernet RX Ports (<i>16 byte payload</i>)	8

Trigger Logic

Ladders	4
Levels per ladder	1 - 4
Inputs (<i>Ethernet RX ports</i>)	8
Outputs (<i>Ethernet TX ports</i>)	4
Counter/Timers (<i>16 bit / cascable</i>)	1 - 4

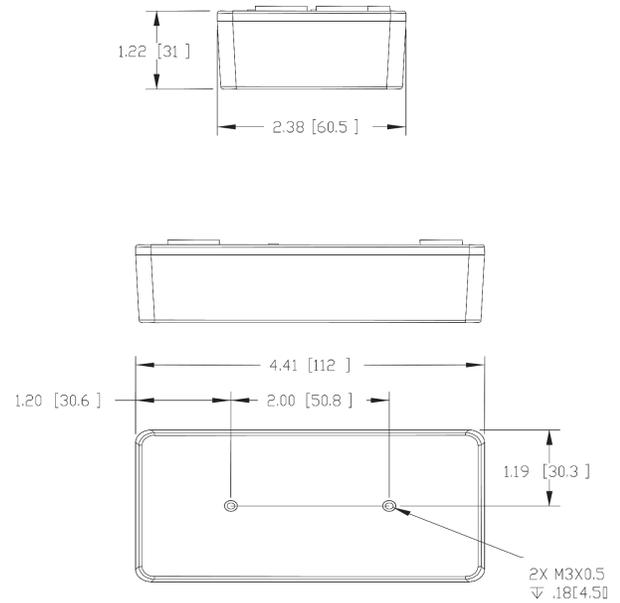
Programmable Logic Controller (*Optional*)

Language	SCORE™
Scan Time	1 µS
Counter/Timers (<i>32 bit</i>)	7
Timer (<i>32 bit / 1 µSec tick</i>)	1
Watchdog	1
Additional Ethernet TX Ports	24
Additional Ethernet RX Ports	24

Physical Dimensions

Length	113 mm
Width	61 mm
Height (<i>Case</i>)	32 mm
Height (<i>Case & Connectors</i>)	36 mm

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