

# IPS960-511-PoE

Vision System with LGA1151 Socket 7th/6th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® H110, 4 PoE, 4 USB 3.0, and Real-time Vision I/O

## Features

- Integrated real-time vision I/O
  - 4-CH trigger input
  - 4 or 8-CH trigger output
  - 4-CH LED lighting control
  - 1-CH quadrature encoder input
  - 16 CH isolated DIO
  - 1-CH auto measurement function
- Supports camera interfaces
  - 4 IEEE802.3at GbE LAN ports (PoE)
  - 4 USB 3.0 ports
- Power input: 24 VDC (uMin=19V/uMax=30V)
- -10°C to +55°C operating temperature range
- Supports 2 swappable 2.5" HDD
- Supports optional WLAN module & antenna
- Supports TPM 2.0 function
- Compact & front I/O design



1. 2 x Antenna opening
2. Remote switch
3. Mic-in & Line-out
4. 2 x LAN
5. VGA
6. Reset switch
7. Power switch
8. Terminal block
9. HDD/Power LED
10. 4 x USB 3.0
11. HDMI
12. I/O module slot
  - (1) AX93511: 4 x RS-232/422/485 (default RS-232)
  - (2) AX93512: 2 x RS-232/422/485 & 1 x 8-in/8-out DIO with isolated 1.5 kVDC protection
  - (3) AX93516: 4 x RS-232/422/485 with isolated 2kVDC module
  - (4) Blank I/O cover
13. 4 x IEEE802.3at GbE LAN port
14. Real-time vision I/O



## Specifications

Standard Color	Silver
Construction	Aluminum extrusion heavy-duty cold-rolled steel, IP40
Processor System	CPU Level 7th/6th gen Intel® Core™ i7/i5/i3 & Celeron® processors, up to 65W (Kaby Lake/Skylake) Chipset Intel® H110
System Memory	2 x DDR4-2133/2400 un-buffered SO-DIMM, up to 32GB
System I/O	1 x Switch for power On/Off (ATX) 1 x Remote switch 1 x Reset switch 1 x 3-pin terminal block 1 x AT/ATX selectable switch 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT) 4 x IEEE802.3at GbE LAN port (Intel® i210-AT, IEEE802.3at compliant, total max. power output 60W) 1 x Real-time vision I/O 4 x USB 3.0 1 x HDMI 1 x VGA 1 x Mic-in 1 x Line-out
I/O Expansion Modules	AX93511: 4 x RS-232/422/485 module (default RS-232) AX93512: 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module AX93516: 4 x RS-232/422/485 with isolated 2kVDC module Blank I/O cover
TPM	TPM 2.0

Vision I/O	- 4-CH trigger input (response time<1us, sink type, input range: 0 to 30V) - 4 or 8-CH trigger output (response time<1us, output voltage: 12V) - 4-CH LED lighting control (24V, Max. 0.5A per channel, LED lighting control setting: Duty 50% and duration time 3.5s) - 1 CH quadrature encoder input (A/B/Z) - 8-CH isolated DI (sink/source type, input range: 0 to 30V) - 8-CH isolated DO (sink type, open collector, supply voltage: 5-30V) - 1-CH auto measurement function (Timer that measures response interval between trigger input and trigger output) - Programmable interrupt functions
Camera Interface	4 x IEEE802.3at GbE LAN port (PoE) 4 x USB 3.0 port
Expansion Interface	1 x Full-size PCI Express Mini Card slot with USB interface
Storage	2 x 2.5" swappable HDD (15 mm height)
System Indicators	1 x Power LED 1 x HDD LED
Power Input	Type: ATX/AT Input: 24 VDC (uMin=19V/uMax=30V)
Operating Temperature	-10°C to +55°C (+14°F to +131°F) with 6th gen Intel® Core™ up to 35W and W.T. HDD/SSD* -10°C to +45°C (+14°F to +113°F) with 6th/7th gen Intel® Core™ up to 65W and W.T. HDD/SSD*
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	10% to 90%, non-condensing
Dimensions	147.5 mm (5.80") (W) x 192 mm (7.54") (H) x 230 mm (9.04") (D)
Weight (net/gross)	4.582 kg (10.10 lb)/5.546 kg (12.23 lb)
Certifications	CE compliance
Software Support	AMS.AXView

\* CPU support list please refer to the user's manual

## Ordering Information

### System

IPS960-511-PoE (P/N: E27A960100)	Vision system with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3 & Celeron® processor, Intel® H110, 4 PoE, 4 USB 3.0, and real-time vision I/O
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### I/O Modules

AX93511 (P/N: 8816G962020E)	4 x RS-232/422/485 (default RS-232)
AX93512 (P/N: 8816G962060E)	2 x RS-232/422/485 & 8-in/8-out DIO with isolated 1.5 kVDC protection
AX93516 (P/N: 8816G962030E)	4 x RS-232/422/485 with isolated 1.5 kV
726G9620610E	Blank metal cover

### Optional

2.5" SATA HDD/SSD	
DDR4-2133/2400 un-buffered SO-DIMM max. up to 32GB	
826G9620020E / 8816G9621A0E	Wall mount bracket kit
50906D24000E	Adaptor 24V/120W, wire only
5A244AP1200E	44-pin DIN-rail terminal board DM44-AP12
594DM443500E	44-pin D-SUB cable, L=1m WHDM44/1.0-6954
594DM443510E	44-pin D-SUB cable, L=2m WHDM44/2.0-6954
594DM443520E	44-pin D-SUB cable, L=3m WHDM44/3.0-6954

\* Specifications and certifications may vary based on different requirements.

## Power Protection

### DC Version

OVP (over voltage protection)
SCP (short circuit protection)
OCP (over current protection)

## Packing List

1 x IPS960-511-PoE
1 x Screw pack
4 x Foot pad
1 x CPU grease
1 x Terminal block
1 x Remote power switch cable
1 x Holder bracket
1 x CN-terminal block 4 x 2 for LED lighting control

## Dimensions

