

# M180 GigE

Multi-Camera Vision Controllers



## FEATURES

- ▼ Ready to use
- ▼ Fan-less design
- ▼ PoE
- ▼ FPGA controlled high-speed I/Os
- ▼ Windows 7 Embedded Standard 64 bit OS; Windows 10 (Coming soon),
- ▼ PCI Express 8x slot
- ▼ 2 SATA HD slots

## ACCURATE CONTROL AND OPEN ARCHITECTURE

The M180 is a vision controller with highly accurate I/O control and with an open architecture. It allows to connect a wide range of cameras and can operate with most machine vision software tools and libraries available on the market. It offers maximized acquisition performance.

The M180-GigE offers 6 Gigabit Ethernet ports with PoE. Each Gigabit Ethernet port is connected to the CPU through a dedicated PCI-Express interface in order to guarantee the maximum acquisition performance.

Camera sync can be implemented using the 6 high-speed trigger outputs or via the Precision Time Protocol (PTP) IEEE1588. One additional Gigabit Ethernet port is dedicated to the LAN connection.

The isolated high-speed digital I/O (8 in / 14 out) allows the perfect low-latency synchronization between vision system, cameras and machine automation.

Thanks to the FPGA technology, implementing real-time logics is incredibly easy.





# M180

## APPLICATION EXAMPLES

- ▼ AOI
- ▼ Web Inspection
- ▼ Print inspection
- ▼ Pharmaceutical
- ▼ Sorting Applications
- ▼ 3D Measurements

### TECHNICAL DATA

M180 GigE	
<b>Processing</b>	
CPU	Intel i7 6820EQ 2.8 GHz Quad Core
FPGA	Altera Cyclone GX 22K LEs (I/O management)
RAM	up to 32GB
Storage	1x SSD up to 256 GB 2x SATA HDD/SSD (optional)
<b>Camera interface</b>	
Protocols	GigE Vision - USB 3.0
GigE Vision ports	6
USB 3.0 ports	4
Camera supply	PoE - USB
<b>Machine interface</b>	
LAN	1x Gigabit Ethernet
Video output	2x Display Port
Serial interfaces	RS232/RS485
Expansion bus	1x PCIe x8 expansion card (Frame grabber, interface board, etc..)
USB 2.0	2x USB 2.0 External / 1x USB 2.0 Internal
Digital inputs	8x isolated PNP
Digital outputs	8x isolated PNP
Trigger	6x fast isolated PNP
Encoder inputs	3-channel Line drive RS422
<b>Electrical</b>	
Power	22 - 27 VDC
Power Consumption	Max 100 W
<b>Mechanical</b>	
Dimensions	286 mm x 197 mm x 73 mm
Weight	3,5 Kg
<b>Environmental</b>	
Cooling	Fanless
Operating Temperature	0 °C - 45 °C
Conformity	2004/108/CE - EN 61326-1:2006 - EN 62311:2008 - RoHS
<b>Software</b>	
Operating System	Windows Embedded Standard (WES) 7 64 bit, Windows 10 (coming soon)

### M100 Series - Part Number

<b>F01851-10</b>	M180 Multi-Camera Vision Controller GigE i7 6Th Gen. DDR4 16GB SSD M.2 64GB
<b>F01851-20</b>	M180 Multi-Camera Vision Controller GigE i7 6Th Gen. DDR4 32GB SSD M.2 64GB
<b>F01851-30</b>	M180 Multi-Camera Vision Controller GigE i7 6Th Gen. DDR4 16GB SSD 256GB
<b>T18396</b>	PCIe expansion for M100 Series

