

# VPS-3100

## Intel® N3160 Processor, 2-port GigE Vision Platform with Lighting Control



### Features

- Intel® Celeron® Quad Core Processor 1.6 GHz
- Compact form factor, fanless vision system
- Built-in PWM lighting control
- Trigger-over-Ethernet support
- GigE Vision offload Engine (GoE)
- GenICam compliant
- IP40 rating

### Introduction

Advantech's VPS-3100 is a rugged and compact embedded vision system equipped with an Intel® Celeron® N3160 Quad Core processor. The GoE feature offloads GigE Vision protocols to a dedicated coprocessor for image reconstruction. The system has two independent Gigabit Ethernet ports for multiple GigE Vision device connections with data transfer rates up to 2.0 Gb/s, offering greatly enhanced computing power and connectivity with a small footprint.

The VPS-3100 supports Power over Ethernet (PoE), which combines the power and signal supply into a single cable and thus facilitates multicamera simultaneous acquisition. With the VPS-3100, the number of cables is significantly reduced, system installation is simplified, and the total cost of ownership is notably lowered. The VPS-3100's powerful and flexible DI/O configuration and compact size make it the perfect vision system for machine vision applications.

### Specifications

▪ <b>Processor</b>	Intel® Celeron® N3160 Quad Core
▪ <b>Frequency</b>	1.6GHz
▪ <b>Memory</b>	4-GB DDR3L
▪ <b>Storage</b>	128-GB mSATA SSD
▪ <b>Security</b>	1-Kbit EEPROM
▪ <b>Camera Interface</b>	2-port GigE
▪ <b>Camera Power Output</b>	15.4 W per port
▪ <b>PoE Standard</b>	IEEE 802.3af
▪ <b>Digital I/O</b>	2 x isolated DI, 4 x isolated DO
▪ <b>Digital I/O range</b>	0-30 V, optically isolated
▪ <b>DI Support</b>	Wet contact (0-30 V) and dry contact
▪ <b>DO Support</b>	Source current type (11-35 V <sub>DC</sub> ) 0.7 A per channel
▪ <b>Digital I/O Max. Frequency</b>	1 KHz
▪ <b>Strobe Control</b>	2-channel
▪ <b>Strobe Control, Output Current</b>	0-500 mA per channel
▪ <b>Dimming Resolution</b>	128
▪ <b>Strobe Out Frequency</b>	Max. 100 KHz
▪ <b>Ethernet</b>	10/100/1000 Mbps
▪ <b>Display</b>	1 x VGA, 1 x DP++
▪ <b>USB</b>	4 x USB 3.0
▪ <b>Serial Ports</b>	1 x RS-232/422/485 (BIOS setting) 1 x RS-232
▪ <b>Power Requirement</b>	Input 24 V
▪ <b>Operating Temperature</b>	0-50 °C
▪ <b>Operating Humidity</b>	~95% @ 40 °C (noncondensing)
▪ <b>Dimensions (W x H x D)</b>	137 x 58 x 118 mm (5.39" x 2.28" x 4.65")
▪ <b>Weight</b>	1100 g (2.425lbs)
▪ <b>Operating System</b>	Windows 7/10, -32/64 bit

### Ordering Information

- **VPS-3100I-10A** VPS-3100 system

#### Quartz Industrial Camera, Monochrome

▪ <b>QCAM-GM3800-007DE</b>	3856 x 2764	7 fps
▪ <b>QCAM-GM3800-010CE</b>	3856 x 2764	10 fps
▪ <b>QCAM-GM3000-018DE</b>	3072 x 2048	18 fps
▪ <b>QCAM-GM2500-020DE</b>	2592 x 2048	20 fps
▪ <b>QCAM-GM2500-014DE</b>	2592 x 1944	14 fps
▪ <b>QCAM-GM1920-040CE</b>	1920 x 1200	42 fps
▪ <b>QCAM-GM1600-060DE</b>	1600 x 1200	60 fps
▪ <b>QCAM-GM1300-060DE</b>	1280 x 1024	60 fps
▪ <b>QCAM-GM1300-030CE</b>	1296 x 966	30 fps
▪ <b>QCAM-GM1280-075DE</b>	1280 x 1024	75 fps
▪ <b>QCAM-GM0640-120DE</b>	640 x 480	120 fps

#### Quartz Industrial Camera, Color

▪ <b>QCAM-GC4600-007CE</b>	4608 x 3288	7 fps
▪ <b>QCAM-GC3000-018DE</b>	3072 x 2048	18 fps
▪ <b>QCAM-GC2500-014CE</b>	2592 x 1944	14 fps
▪ <b>QCAM-GC1300-060CE</b>	1280 x 1024	60 fps
▪ <b>QCAM-GC0640-120CE</b>	640 x 480	120 fps

#### Vision Software

▪ <b>EZB-EEV-10ID</b>	EzBuilder Identification Software
▪ <b>EZB-EEV-10AL</b>	EzBuilder Alignment Software
▪ <b>EZB-EEV-10IN</b>	EzBuilder Inspection Software
▪ <b>EZB-EEV-10FU</b>	EzBuilder Full Functions Software