



## Main Features

- In-vehicle and machine vision applications
- 4/8-Port independent GbE with PoE+ function
- 2KV isolation for LAN signal and power line
- PoE on/off and power watt monitoring per port
- One ultra-fast NVMe storage media
- Half length PCIe card for easy and quick install
- 9K-byte Jumbo frame and PTP (IEEE 1588) support
- "Compliant with E-Mark, CE/FCC ClassA and MIL-STD-810G for anti-vibration/shock"
- Tough environment with operating temp -30~85°C

## Product Overview

With built-in Intel® 82580EB controller, GE64 supports up to 4 independent GbE with 1000Mbps satisfying a decompressing video stream at 4K/8K resolutions in high frame-rate used on AI-aided secure surveillance, auto-inspection/machine vision in smart factory, etc. applications. VIOP-GE64 is equipped with an excellent protection of OCP/OVP and up to 2KV isolation of data and power Ethernet to avoid any transient surge or damage to LOM system. Besides, to be installed on ATC 8110 product, NVMe SSD in M.2 2280 slot is activated, for usage to meet the ultra-fast media storage requirement for data integrity. Harsh environment is more and more important that GE64 is compliant with military MIL-STD to sustain the vibration and shock and the operating temperature can reach up -30~85°C in the harsh environment.

## Specifications

### PCI Express

- PCIe 2.0/3.0 x4 lane compliant
- Extra proprietary PCIe slot for NVMe storage expansion
- Half-length in size

### Ethernet

- 4-Port RJ45 independent 10/100/1000 GbE
- IEEE 802.3/802.3u/802.3ab and IEEE802.3x
- 9K-byte jumbo frame
- IEEE 802.1AS/IEEE 1588 (PTP) support
- Power GbE controller: Intel® 82580EB

### Power over Ethernet (PoE)

- IEEE 802.3af/at compliant
- 25W per port, 4-port at 60W in max.
- Conjunction to 8-port PoE at 120W in max.
- PoE on/off and power watt monitoring
- 8-Pin power connector for 12VDC-IN

### Protection

- OCP & OVP
- 2KV isolation for Ethernet

### NVMe Media Storage\*

- Form Factor: 1x M.2 key-M (2280 in default) slot
- Interface: PCIe 3.0 x4
- Compatible to key B+M with PCIe 3.0 x2 interface
- Fixed screw holes with 42mm, 60mm, 80mm & 110mm reserved

### Environment & Regulation

- Operating temperatures: -30~85°C
- Storage temperatures: -40~85°C
- Damp heat test per EN60068-2-30
- Humidity: IEC60068-2-3, 40C, 95%, 48Hrs
- CE, FCC class A, E-Mark (pre-installed on ATC 8110)

### Mechanics

- Anti-vibration
  - IEC 60068-2-64.2.5G (5~500Hz)
  - Operating: MIL-STD-810G, 514.6C Procedure 3, Category 4
  - Storage: MIL-STD-810G, 514.6E Procedure 1, Category 24
- Anti-shock
  - MIL-STD-810G, 516.6 Procedure I, trucks and semi-trailers=40g
  - Crash hazard: Procedure V, ground equipment=75g
- Dimension: 168mm x 111mm (L x H)
- Weight: 177g

## Ordering Information

### • VTK-GE64 (P/N:10VK0GE6400X0)

4 x RJ45 independent: GbE/GigE, PoE, PCIe 3.0 x4, 1 x NVMe M.2 slot, inner cables

\* Note: NVMe M.2 storage is valid when GE64 is installed on ATC8110 series