



Description

The ComSys-5001 is a high performance mission compute platform ideal for vehicular applications in demanding environments in defense, industry, homeland security and agriculture. On top of a rich set of standard I/O and the latest 4th Generation Intel processing power and graphics support, the system is a Cisco certified routing engine complete with the full suite of mobile routing protocols essential for network attached equipment on the move. In addition, the ComSys-5001 provides dual band Wifi connection for maximum transmit and receive ranges in wireless networks. Support for CANbus rounds out the major features of the ComSys-5001 enabling intra-vehicular communication between essential electronic assets on board. Packaged in a small, sealed and light weight chassis, the ComSys-5001 is ready to perform.

Features

- 4th Generation Intel® Core i5-4400E 2.7 GHz CPU with GT2 level graphics
- Cisco IOS Software with Cisco Mobile Ready Net IP routing
- CANbus support for intra-vehicular electronic systems communication
- Dual band Wi-Fi 802.11 a/b/g/n for maximum tranceive ranges
- Configurable to over 64GB SSD storage
- Passive conduction cooled and fanless thermal design
- Modular solution using standard Type 6 COM Express modules

Benefits

- Mobile users can quickly and seamlessly establish ad hoc networks as nodes shift relative positioning or fixed network infrastructure.
- Cisco IOS software familiarity minimizes training expense
- Ideal for space constrained, rugged, or extended temperature applications
- Modular design allows easy adaptation to evolving mission requirements without expensive carrier redesign
- Easy CPU and I/O upgrade reduce tech refresh costs using industry standard Type 6 COM Express, XMC/PMC and mini PCIe modules.
- SWaP optimized for space constrained applications

The End of Carrier Redesign

The ComSys-5001 is part of our COM Express based family of configurable systems. More than typical embedded systems, they can reduce deployment costs by simplifying reconfiguration across a wide range of I/O feature sets and CPU options. Its base modular construction and advanced carrier design enables easier adaptation to meet evolving mission requirements – without redesigning the carrier card:

- PMC / XMC site provides simpler re-configuration as functional requirements change
- Dual mini PCIe sites enable a wide range of additional I/O combination
- Elma's unique mid I/O card further eliminates carrier redesign normally required for high speed XMC I/O signals
- Accepts all industry standard Type 6 COM Express modules

ComSys-5001 Rugged Vehicular System

Intel CPU, Cisco Mobile Router with CANbus and Wifi



Single Board Computing Networking

Specifications

CPU	i5-4402E 1.6 GHz (2.7 GHz Turbo), 25W 8GB, dual channel non-ECC 1600/1333 MHz DDR3L memory Generation 7.5 graphics core architecture
Environmental	Operating temp: -40°C to +71°C Storage temp: -40° C to +85°C Operating Shock: 40gs @ 11ms half sine Random Operating Vibration: 20 to 2000Hz @ 5g,rms IP65 compliant Humidity: 95% non-condensing Designed to MIL-STD 810G Test methods and requirements Designed to meet MIL-STD-461 and DO-160 conducted and radiated emissions and susceptibility
Physical	90mm H x 243mm W x 177mm D (3.5" H x 9.5" W x 6.9" D); Estimated Weight: 7.8 lbs. (3.5kg) as configured Cooling: Passive, no fans
I/O Connections	Circular MIL-DTL-38999 connectors: 4 x USB 2.0 ports 1 x DVI port 1 x DisplayPort 2 x Gigabit Ethernet ports 1 x Analog VGA 1 x Wifi, dual antenna (mini PCIe) 2 x CAN (mini PCIe) Additional 2 x RS482/422 full duplex channel Additional 4 x GPI, 4 x GPO pins 1 x RS232 TX/RX serial port 1 x RS232 serial with handshake signals
Ordering Options	Conformal coating: HumiSeal 1A33 applied in accordance with MIL-I-4605
Power	28V input voltage, 60W max power MIL-STD-704F & MIL-STD-1275D compliant

Applications

The ComSys-5001 addresses the demanding compute-intensive and critical communication requirements in mobile and fixed ground network assets common in defense, emergency response, mining, industrial and agricultural applications.



Order Number: COS-50G-01

Rugged mission compute system with 4th Generation Intel CPU configured with Cisco routing, CANbus and Wifi connectivity.

Please contact our sales for more details.

China: +86 21 5866 5908
France: +33 437 06 21 10

Germany: +49 7231 97 34 0
Israel: +972 3 930 50 25

Singapore: +65 6479 8552
Switzerland: +41 44 933 41 11

United Kingdom: +44 1234 838 822
United States: +1 510 656 3400

For other countries, please visit our website.

Elma Electronic • www.elma.com