OnTime Networks introduces new Fully Rugged Military Multi-Function COTS all-in-one system: Gb/10Gb Ethernet Switch, Router, Time Server and Computer


The CM/CR-6228 Series has been recently selected for an international multi-engine mission aircraft program. The selection of the CM/CR-6228 was influenced by its high performance modular, scalable and future-proof architecture, as well as its advanced features and compact size.

The new CM/CR-6228 Series provides four (4) different capabilities in one SWaP-optimized Multi-Function COTS all-in-one platform:

**Network Ethernet switch: Layer 2/3 switch** with up to 28 ports, including up to 4x 10GbE copper or fiber ports

**Network Ethernet Router: Layer 3 router** option
- OnTime VyOS router package
- Cisco 5921 Embedded Services Router (ESR) with Advanced Enterprise protocols
- Architecture Technology Corp. (ATC) Routing and Encryption Suite (ARES) with NIAP, CSIC, and Common Criteria (CC) certification

**GPS Time Server Capability:** (IEEE 1588 PTP, NTP, IRIG-B, PPS and 10MHz)

**Rugged Computer:** Single Board Computer (SBC) with intel Atom E3845 or E3900 series, with:
- One (1) DisplayPort out
- Up to 32GB DDR3
- Two (2) USB 2.0 ports
- Specialized or custom solutions firmware
- One (1) serial port with RS-232

---

**Press Contact – Norway**
Byvind Holmeide

**Press Contact – USA**
Marston Scharke
With nearly 20 years experience helping customers by providing state-of-the-art networking solutions for aerospace and defense applications, OnTime Networks knows what it takes to provide unique, fully deployable rugged and powerful systems.

The new CM/CR-6228 Series not only combines the latest hardware and software in a SWaP optimized packaging, but also features unheard of modularity (mix and match functionality), which is highly attractive to address Department of Defense (DoD) program needs.

**Modular, scalable and flexible design**

“"We are very proud that our cutting-edge CM/CR-6228 Series has been selected for use in an important new fixed-wing mission aircraft program and that our technology will assist the airborne teams in achieving their missions," said OnTime Networks’ CEO Øyvind Holmeide. “This significant win highlights the benefits of our modular and flexible design approach, which was particularly applicable to the unique requirements of this program. Pål-Jørgen Kyllesø, CTO of OnTime Networks further commented, "The CM/CR-6228 Series is the first fully rugged Multi-Function COTS all-in-one system, combining the capabilities of a 28 Port Ethernet Switch, Router, Time Server and Computer."

The integrated GbE/10GbE switch provides a total of 28 Ethernet ports, of which 24 ports are 10/100/1000 BASE-T ports and 4 ports are 1000 or 10000 BASE-T or SR. The CM/CR-6228 Series enables secure, managed network routing and GbE switching capabilities for onboard communications and computing subsystems. The unit is specifically designed to
provide reliable, high-performance connectivity for extremely demanding size, weight and power (SWaP) constraints in harsh, demanding environments (e.g. high altitude, extreme shock and vibration, extended temperatures, humidity, dust and water exposure, noisy EMI, dirty power).

The CM/CR-6228 Series router implementation is based on a separate router board with an Intel Atom processor and can either be equipped with the OnTime Networks router package providing routing speeds of up to 800Mbps or with the Cisco® 5921 Embedded Services Router (ESR) Advanced Enterprise router package, or the Architecture Technology Corp. (ATC) Routing and Encryption Suite (ARES) with NIAP, CSfC, and Common Criteria (CC) certification.

Its modular, rugged design, enclosed in a completely sealed housing against dust and water ingress (IP68), requires no active cooling and provides MIL-DTL-38999 connectors. The unit features a military-grade power supply for aircraft (MIL-STD-704F) and ground (MIL-STD-1275D) vehicle use, as well as MIL-STD-461F EMI/EMC filtering.

About OnTime Networks

OnTime Networks is a technology leader for rugged, time-synchronized, fully managed, modular Gigabit Ethernet switches, specifically designed to operate reliably in the harsh and climatically demanding environments of the Aerospace and Defense Industry. Recognized for innovation and excellence, OnTime focuses on precise time over Ethernet according to IEEE 1588 (PTP) as core technology. For more information, please visit www.ontimenet.com.