



# COMMON TRUSTED PLATFORM (CTP) MINI

## Security and Performance You Can Trust

The Common Trusted Platform (CTP) supports multiple geosynchronous to low-earth orbit (GEO-LEO) applications from Crypto and Cyber, Network, Command and Control Mission Data Link (C2 MDL), and Space Radio modem functions. It provides the basis for next generation, high-speed networking of proliferated satellite networks to globally collect and disseminate data the warfighter needs while simultaneously elevating the security posture of these networks through robust, customizable, future-proof, high-assurance encryption. The core features include secure boot with reprogrammable operational images and a recovery image that support on-orbit authenticated software/firmware update enabling Zero Trust Architecture. The CTP provides services such as Over The Network Keying (OTNK), high-speed ethernet interfaces and SpaceWire.

Crypto and Cyber applications include:

- High Assurance Internet Protocol Encryption (HAiPE) or FIPS-compliant 15Gbps COMSEC (e.g. AES GCM)
- TRANSEC generator, bypass, software/firmware and user authentication, cross domain solution (Guard)
- Key Management Infrastructure (KMI) compatible, intrusion detection system (future), MCU110, KG42 compatible (future)

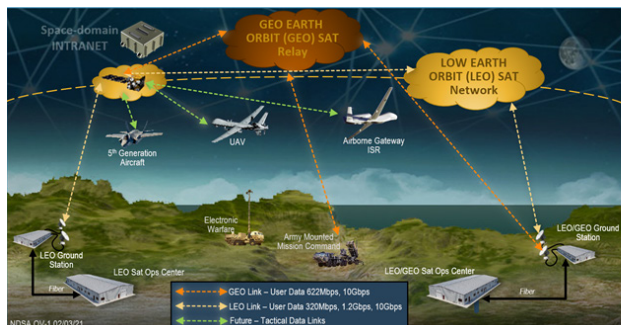
Network applications include:

- 10Gbps compatible on 8 ports, use-case specific routing
- Border routers between enclaves including terrestrial standards
- Constellation network management with trusted, predictive routing information
- C2 MDL with RF/ADC/DAC companion module (L/S, X, and Ka version)

## Innovative Features

- Secure Boot – Dual Image Paradigm: application-specific Operational images with Recovery image enable a trusted fallback state and on-orbit reprogrammability
- Over the Network Keying and Authenticated Update: interfaces with NSA KMI for re-keying and updates/ replacement for Operational Image following KMI 3300 standard

SPECS	CTP MINI
<b>ORBIT</b>	GEO MEO LEO, 15 YEAR
<b>SECURITY LEVEL</b>	TSAB, MLS OR MILS
<b>RADIATION TOLERANCE</b>	100K Rad (si)
<b>Crypto Algorithms/ Applications/ Waveforms</b>	Watari, HAIPE, AES, Medley, Carousel, Cardholder, Pegasus, OTNK/OTAR, Networking, DoD Tactical or Exfil Modem functions
<b>Encryption Speed</b>	15 Gbps aggregate
<b>Interfaces</b>	Eight (8) x 10 Gbps KR Ten (10) x SpaceWire (LVDS) One (1) x RS485
<b>Size/Mass</b>	5.5 x 5.25 x 2.65" (76.5 in <sup>3</sup> ) 2.7 lbs.
<b>Power</b>	5 nominal VDC input < 15W
<b>Mission Class</b>	Mission Class B



CTP Mini



5.5 x 5.25 x 2.65"

## For More Information, please contact:

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