

SecureARX

EPM SATCOM MODEM



SecureARX Multi Channel Modem

**AUGMENTING YOUR
GOVERNMENT SATELLITE
RESOURCES by OFFERING
MILITARY GRADE
PROTECTION**

FEATURES

- Strong protection against jamming and interception
- Low probability of interception
- Advanced Quality of Service (QoS) supported by IP networking
- One modem for fixed, land mobile, naval and airborne applications
- SOTM with ESM and EMCON features
- MIL-STD-810G and MIL-STD-461E compliant



SecureARX Single Channel Modem

SYSTEM CHARACTERISTICS

- Data 10/100/1000 Base-T Ethernet
- Protected communications for IP sub-networks
- Compatible with the STANAG 4606 Ed. 3 Waveform
- Star or mesh connected network topologies
- Applicable to operations over SHF (C, X, Ku & Ka) Bands
- 2 Form factors: Single Channel 1U, Multi Channel 8U

SECURITY

- TRANSEC protection enabled by using Orthogonal Frequency Hopping Multiple Access (OFHMA)
- NETSEC (Signaling Security)
- Optional COMSEC (AES)

SATCOM ON THE MOVE (SOTM) CAPABILITY

- TRANSEC protection enabled by using Orthogonal Frequency Hopping Multiple Access (OFHMA)
- NETSEC (Signaling Security)
- Optional COMSEC (AES)

BANDWIDTH OPTIMIZATION

- Advanced ACM technology
- Dynamic Rate Adaptation
- Demand Assigned Multiple Access / DAMA
- Uplink Power Control

MODULATION AND DATA RATES

- FEC : Reed Solomon / Turbo Code
- MODCOD: BPSK 1/3, 1/6; QPSK 1/2, 1/3, 1/4, 2/3, 3/5; 8PSK 1/2, 1/3 and more
- Data Rates (bps): 20K, 25K, 32K, 40K, 50K, 64K, 128K, 256K, 384K, 512K, 768K, 1M, 1.2M, 1.6M, 2M, 3M, 4M, 8M, 16M, 32M, 50M, 100M

CONTROL AND MONITORING

- PC Based GUI for local Control and Monitoring
- SNMP interface with the customer HQ

FREQUENCY REFERENCE

- High stability internal frequency reference
- Input for optional external frequency reference

RF CHARACTERISTICS

- L-Band: 950 to 1,450 MHz
- OFHMA over 500 MHz bandwidth
- Output Level: -25 to 0 dBm
- Output Level: -70 to -13 dBm



Military forces and government rely on robust, secure and jamming resistant communications capabilities with a low probability of Interception in friendly and hostile environments. Similar communication capabilities are needed for government operations during emergencies, natural disasters and hazardous conditions.

CTech's SecureARX Modem is intended for military and government applications, and can satisfy all the requirements for fixed, land-mobile, naval and airborne SATCOM use cases and scenarios. It is the most spectrum efficient and secure high speed SATCOM modem solution available in the market, today.

By using a mix of fixed, transportable and on-the-move terminals at the same time, reliable, flexible, survivable and secure networks can easily be established, managed and operated under extreme circumstances. CTech's SecureARX Modem is a world class SATCOM modem solution available for military, government and official applications.

It is compatible with NATO standards, however national waveforms can easily be implemented on the same flexible design platform. Maintenance and upgrades can easily be performed by SW/FW changes. CTech's proprietary management system provides users with flexible planning, control and monitoring tools while sustaining end-to-end secure and reliable communication links and networks.