



TELEMETRY & COMMAND TRANSPONDERS / TRANSCEIVERS



- DoD/NASA/ESA compatible
- Over 300 units flown
- High reliability/radiation hardened design for up to 15-year missions
- Available with embedded COMSEC
- Numerous interfaces available

MISSION DATA TRANSMITTERS



- High data rate — up to 320 Mbps flown, > 1.2 Gbps capability
- Radiation-hardened
- Flight-proven; over 4 decades of on-orbit experience

INFORMATION SECURITY PRODUCTS



- Standalone or embedded solutions
- Flight-proven, radiation-hardened
- Numerous algorithm options available



*Excellence
You Can
Measure*



UNSURPASSED RELIABILITY AND FLIGHT-PROVEN HERITAGE IN SPACE



SGLS Secure Transponder
CXS-810C



SGLS/USB Secure Transponder
CXS-2000



Command Decryption Unit
CDU-100

L-3 is a proud supplier of secure communication and TT&C products to government and commercial customers worldwide. With more than 150 units put into orbit to date, our high-reliability, flight-proven space products provide a complete solution for your mission needs. To learn more, go to L-3com.com/TW.



Telemetry-West

L-3com.com

TELEMETRY & COMMAND TRANSPONDERS

CXS-810C SECURE SGLS TRANSPONDER

- SGLS-compatible transponder
- Available with or without COMSEC
- AM / FSK / PM uplink
- BPSK / PM downlink
- 5 watt output
- 15-year mission life
- Utilizes multi-function ASIC for numerous functions such as VGA, mixer, divider, etc.



CXS-610 STDN TRANSPONDER

- STDN / USB compatible
- BPSK / PM uplink
- BPSK / PM downlink
- 15 year mission life
- Utilizes multi-function ASIC for numerous functions such as VGA, mixer, divider, etc.



CXS-2000 DUAL-BAND SGLS / USB SECURE TRANSPONDER

- Multimode PM, FSK/AM, BPSK
- 15 year mission life
- 5 watt output
- Embedded encryption/decryption
- 1553 interface available
- Available with optional triplexer



TRANSCEIVER

MSX-765 MINIATURE S-BAND BPSK COMMAND AND TELEMETRY TRANSCEIVER

- High rate uplink to 64 Kbps, optional 128Kbps
- High rate downlink to 2 Mbps, optional 10 Mbps
- 5 watts of RF output power (after diplexer)
- 4.2 lbs. maximum
- Standalone transmitter (MST-765) and receiver (MSR-765) configurations available
- Diplexer integrated transceiver available



40 YEARS OF PROVEN FLIGHT HISTORY | DO

MISSION DATA TRANSMITTERS

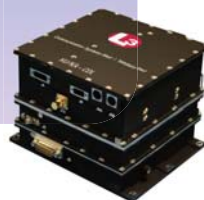
CTK-830 KA-BAND HIGH DATA RATE TRANSMITTER

- High data rate payload application
- Data rates > 1.2 Gbps, capable to 1.6 Gbps
- QPSK
- LVDS or PECL interfaces
- Convolutional encoding



KU-CDL TRANSMITTER

- Joint product with L-3 CSW
- Ku-Band
- Utilizes Common Data Link Protocol
- Data Rate: >250 Mbps
- ORS Application



CTX-886 X-BAND DATA TRANSMITTER

- Data rates to 400 Mbps
- Rate $\frac{1}{2}$ or $\frac{7}{8}$ convolutional encoding available
- QPSK / BPSK modulation
- 6 watts of RF output power



ZENS OF PROGRAMS | HUNDREDS OF UNITS

INFORMATION SECURITY PRODUCTS

MCU-110B MINIATURE CRYPTO UNIT

- Compact, lightweight, standalone, encryption/decryption solution
- Standard algorithms
- Data rates: up to 5 Mbps decrypt, 10 Mbps encrypt
- Successful second-generation unit
- Available options:
 - MDU-131 (decryptor)
 - MDU-133 (Dual decryption unit)
 - MEU-121 (encryptor)



CDU-100 COMMAND DECRYPTION UNIT

- Lightweight exportable C&DH plug in module for command uplink protection
- Provided for numerous commercial programs including: Intelsat 10, Inmarsat 4, AMC-23, ANIK F3 and Galaxy 17
- Utilizes multiple decryption algorithms



MCU-600 (CTP) MODULAR CRYPTO UNIT

- Encrypt/Decrypt/TRANSEC processor
- 100 Mbps high data rate encryption
- Customized encrypt/decrypt/transec configurations available
- Internally cross-strapped and fully redundant modules



NOTES





EXCELLENCE YOU CAN MEASURE

L-3 Telemetry & RF Products has over 50 years of heritage, bringing performance and value to virtually every major defense and aerospace organization in the World. We're joined in that legacy by over 100 L-3 divisions, each a leader in it's area of expertise — from microwave components, antennas and telemetry instrumentation to satellite communications and secure communications systems. Our breadth of capability continues to grow with full spectrum solutions including integrated ground-based and airborne telemetry components and systems as well as complete systems engineering and integration services. Turnkey solutions from a single source — delivered on time and with complete after market support. That's what L-3 is all about. With over 14 billion dollars in annual revenue and one of the highest ratios of engineering staff to total employees, we have what it takes to give you the competitive edge.

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