3591 CES-128 VOICE ENCRYPTOR

↗ FEATURES AT A GLANCE

- CES-128 encryption
- Digital Signal Processor (DSP)-based
- Optional 4-digit secure PIN for additional privacy
- Secure standby mode
- HF / VHF / UHF support
- Tolerant to poor channel conditions
- Compatible with 2110/M and NGT™ family of Transceivers
- Multiple platforms supported including intercom systems
- Remote controllable
- Low-power 10 to 36 V operation
- Flange-mountable option
- MIL-STD-810G environmental
- 3 year Warranty

The 3591 CES-128 Voice Encryptor provides communications security (COMSEC) through use of a proprietary 128-bit encryption algorithm. The unit's compact size supports multiple deployment scenarios from manpack to mobile to base platforms.

BRIDGING THE GAP

The deployment of the 3591 CES-128 Voice Encryptor enables Commanders to bridge the interoperability gap between multiple vendor fielded radio networks. Utilising the same encryption module as the 2110/M and NGT™ family of CODAN™ Transceivers, the 3591 ensures flexibility in deployment with secure interoperability.

EASE OF USE

The 3591 features a simple, intuitive 6-button interface for control of volume, encryption key and Secure/Clear Status. Key programming is achieved using Codan's standard KMS (Key Management Software) or KFS (Key Fill Software), as used with Codan's Transceivers.

SPECIFICATIONS

OPERATIONAL

Off (on loss of power)	Switches to bypass mode, transceiver volume control—handset interface only
Clear	Bypass mode: Volume control via transceiver Controlled mode: Volume control via 3590 front panel; Selectable Mute
Secure (Encrypted)	Volume control via 3590 front panel; Selectable Mute, Key Index, Vocoder Rate
Security	Settings are administrator password protected Selected key can be locked, Secure/Clear state can be locked All keys can be zeroised via front panel
Secure keys	97 x 16-digit Corporate keys 1 x 8-digit Corporate base key 1 x 16-digit Global key
Remote control	All functions controllable utilising RS232 serial commands
Display	White back-lit, On/Off/Auto backlight modes
Programming	PC utilising KMS (Key Management Software) or KFS (Key Fill Software)

GENERAL

Audio interface	Low level: Input 1 to 200 mV P-P, unbalanced; Output 0 to 5 V P-P, unbalanced Line level (600 Ω): Input 10 mV to 2 V P-P, balanced; Output 0 to 5 V P-P, balanced Passband: 300 to 2700 Hz Frequency Offset: ±100 Hz Maximum
Audio delay	250 ms, Secure mode
Transceiver interface	Input 10 mV to 30 V P-P balanced, Output 10 mV to 5 V P-P balanced
Supply voltage	10 to 36 V DC (12/28 V DC nominal), reverse polarity protected
Supply current	20 mA @ 13.8 V DC typical, Clear mode, backlight off 50 mA @ 13.8 V DC typical, Secure mode, backlight on (350 mA max) <1 W over full input range, typical, Secure mode, backlight on
Temperature	−30 to +60°C
Environmental	Designed to MIL-STD-810G for Immersion (1 m), Shock, Vibration, Blowing Dust, Salt Fog, Humidity and Drop

MECHANICAL

Handset interface	6-pin (Amphenol part no: 164-183-6-P), compatible with 5-pin U-229 style plugs
Computer interface	14-pin bayonet (Amphenol part no: 62IN-12E-12-14S-219-624)
Remote control	19-pin bayonet (Amphenol part no: 62IN-12E-14-219-624)
Power supply	2-pin bayonet (Amphenol part no: 61IN-12E-8-2S-624)
Dimensions and weight	Non-flanged version: 174 mm W × 81 mm D × 40 mm H; 0.6 kg Flanged version: 174 mm W × 99 mm D × 40 mm H; 0.6 kg
Colour	Black

SYSTEM

3591 CES-128 Voice Encryptor	08-07080-003
3591 CES-128 Voice Encryptor—Flange Mount	08-07080-004
3951 CES-256 Voice Encryptor—User Guide	15-04173-EN
Key Management Software	15-04168-EN
Key Fill Software	15-04171-EN

CABLES

Cable, Transceiver to 3591 (unterminated)	08-07085-001
Cable, Power to 3951 (unterminated)	08-07086-001
Cable, Remote Control & Balanced Interface	08-07087-001
Cable, USB to 19-way Programming	08-06901-001

RADIO COMMUNICATIONS