



TRW Electronic  
Products Inc.

## ▶ KL-43C Rugged Text Encryption Terminal For Field Operations

With this text encryption terminal, you can send and receive classified messages over unprotected telephone lines and radio links under rugged field conditions.

The KL-43C operates as a hand-held word processor, allowing you to type and edit 2,600 character messages using the standard QWERTY keyboard. Special function keys and on-screen prompts simplify each operation. First-time users can master the word-wrap, text insertion, and string-search features in minutes.

You can rapidly encrypt or decrypt messages with the terminal's menu-driven software routines. The battery-powered memory maintains multiple keys, which can be updated to minimize key distribution. The 2 line by 40 character Liquid Crystal Display (LCD) allows you to quickly review and respond to messages.

The KL-43C adapts to almost any field communications equipment. It is compatible with tactical radios through a standard audio connector. The internal modem allows telephone connections through the acoustic coupler, which is mounted inside the case. Direct con-

nections are established via an external adapter. Serial data transmission uses RS-232C protocol from 300 to 9600 baud. Dual text buffer design allows you to receive a message without losing any message in process.

This ruggedized terminal is sealed in a durable housing and based on advanced Surface Mount Technology (SMT). It can withstand exposure to rain, salt spray, dust storms or fungus. Automatic self tests assure that critical features are working properly.



The KL-43C is a member of TRW's family of text encryption terminals. For more information about this low-cost, dependable way to protect your sensitive communications, please contact us now.

*The KL-43C is a Controlled Cryptographic Item and is subject to U.S. Government restrictions on access and purchases.*





## Features

- ▶ Rugged and compact
- ▶ Dual message word processor
- ▶ Interoperable with fielded KL-43 family of encryption terminals
- ▶ Designed to meet NACSIM 5100A for TEMPEST
- ▶ Designed to comply with many MIL-STD-810C environmental specifications
- ▶ Built-in modem, acoustic adapter and RS-232C interface
- ▶ Connections provided through standard six pin audio connector for tactical radio
- ▶ Operates with RS-232C serial printers
- ▶ Up to 75 hour operating life on 4 "AA" batteries
- ▶ Real-time clock

## Operating Specifications

Power: 4 "AA" size batteries

Battery life: Alkaline—33 hours  
Ni-cad—16 hours  
Lithium—75 hours

Display: 2 line by 40 character Liquid Crystal Display (LCD)

Keyboard: Standard QWERTY plus 15 special function keys with no shifted functions

Message: Dual message buffer, each with 2,600 character capacity

Data interface: EIA RS-232C at 300,1200,4800 and 9600 baud

Modem interface: Acoustically coupled or direct connect (via adapter), Bell-103 format, 300 baud, simplex

Radio interface: 20 mV RMS at radio in, 250 mV RMS at radio out, push-to-talk dry relay closure to ground

## Physical

Dimensions: Width, inches (mm) 6.5 (165)  
Height, inches (mm) 1.4 (36)  
Depth, inches (mm) 3.5 (89)  
Weight, lbs. (kg) 1.5 (0.68)

## MIL-STD-810C Environmental Specifications

### Temperature

Operating: - 20 to + 50 C; - 4 to + 122 F (Method 501.1-I)

Storage: - 40 to + 65 C; - 40 to + 149 F (Method 502.1-I)

Altitude: Operates from 0 to 15,000 feet (Method 500.1-I)

Immersion: Functional after immersion to a depth of 36" for 2 hours (Method 512.1-I)

Shock: Operational after a drop to a 2" thick sheet of plywood backed by concrete from a height of 48" (Method 516.2-II)

Vibration: Equipment may be transported as loose cargo (Method 514.2-I,X,XI)

Humidity: 100% humidity with condensation on the unit, both operating and non-operating (Method 507.1-II)

Rain: Operates during and after a 2 hour exposure to rain (Method 506.1-I)

Salt fog: Functional after exposure, salt deposits allowed (Method 509.1-I)

Fungus: No fungus growth on exterior or accessible interior surfaces (Method 508.1-I)

Dirt and Dust: Sealed to resist sand and dust particles (Method 510.1-I)



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