

AN/URC-138(V)1(C)

Link 16 Low Volume Terminal



Link 16 – a key enabler for network centric warfare

The AN/URC-138(V)1(C) Information Distribution System provides anti-jam protected, encrypted, high throughput data distribution. It's low cost, makes Link 16 participation affordable. The small size and low weight of the AN/URC-138(V)1(C) terminal makes it suitable for a broad variety of other platforms.

The small, lightweight AN/URC-138(V)1(C) terminal is waveform, message format and network compatible with existing Link 16 systems. The terminal provides Link 16 interoperability between the U.S. tri-services and NATO forces.

Link 16 provides at-a-glance situation awareness by providing threat, target and friendly ID, position and status information among participating platforms in near real time, with anti-jam security without any voice communication.

The terminal provides full stacked net capacity, up to 128, and full Link 16 data throughput. The system can automatically exchange information from a variety of platform sensors. This can include functions such as IR and optics scan, target identification and steering commands. Real-time data updates can also be used to provide landing cues.

In addition to robust data communication, the AN/URC-138(V)1(C) terminal also provides two voice ports to enable secure voice communication in a jamming environment.

Terminals have been in production since December 1999.



Features

Specifications

Low production unit cost

Link 16 compatible waveform and message format

High net capacity and data throughput

Fully interoperable with current U.S. and NATO JTIDS systems

Spread-spectrum, frequency hopping, anti-jam protected communications

High reliability: MTBF >2000 hours

Modular hardware, SEM-E format, plug-in modules to meet changing mission requirements

Modularity, tailorable to platform specific needs

Designed to accommodate future growth options

Functionally partitioned ADA software

Small size, low weight, air cooled

The AN/URC-138(V)1(C) Link 16 terminal is truly state-ofthe-art design. Both hardware and software are modular and functionally partitioned. This speeds system configuration changes and upgrades, simplifies changes required by mission variations and maintenance and helps ensure low life-cycle cost.

Operational Characteristics

Net Participation:

TDMA

128 nets maximum 128 time slots/sec/net

Message Catalog: J-Series messages as defined in

STANAG 5516

Frequency Operating Range: 969-1206 MHz Informational Data Rates: 28.8 to 238 kb

Anti-jam: Frequency hopping

Forward error detection/ correction

Range (max) 400nm

BIT

System detection 98%

Module isolation 98% to 3 SRU's

90% to 1 SRU

Electrical Characteristics

RF Power Output (max) 200W

I/O Data/Voice

Data MIL-STD-1553
Voice Port 1 LPC-10 (2.4kbs)
Voice Port 2 CVSD (16kbs)
Antenna JTIDS compatible

Power Dissipation (avg pwr) 750W Primary Power 120VaC 3 ϕ 400 Hz

Physical Characteristics

Size (max) L 12.52 in (318mm)

W 10.1 in (256.3mm) H 7.5 in (191mm)

Volume (max) 0.55 Ft 4 Weight (max) 44 lb (20kg)

Packaging SEM-E module form factor Cooling

Forced air Mounting Hard mount

Data Link Solutions (DLS) has brought situational awareness to more than 2000 platforms, as a critical first step to network centric warfare. Established in 1996 by BAE SYSTEMS and Rockwell Collins, DLS is a leading supplier of Link 16 terminals and system integration, software, logistics and support services.



BAE SYSTEMS

164 Totowa Road PO Box 975 Wayne, NJ 17474-0975 Phone: 973.633.6000 Fax: 973.633.6167

www.cni.na.baesystems.com

Rockwell Collins

400 Collins Road NE Cedar Rapids, Iowa 52498-0120

Phone: 319.295.5100 Fax: 319.295.4777

E-mail: collins@rockwellcollins.com www.rockwellcollins.com/gs