

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. Its 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

- 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-of-the-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.

Specifications

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 Ft³
- Weight (max) <44 lb (20kg)
- Packaging SEM-E module form factor
- 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.



www.datalinksolutions.net
319.295.4DLS (4357)

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