

# AN/USM-638 RF Transmission Line Test Set

## Tomorrow's test technology today

BAE Systems' USM-638 portable Radio Frequency Transmission Line Test Set (RFTLTS) provides automatic testing and fault detection of coaxial and waveguide transmission systems and components. The self-contained RFTLTS provides fast and accurate measurements of insertion loss, voltage standing wave ratio (VSWR), and distance-to-fault over an ultra broadband frequency range. Designed for ease of operation, RFTLTS uses menus and prompts to guide operator actions, and has a sunlight-readable graphic display.

## Suitable for any platform with RF Transmission Lines

Test acceptance data can be retained in a removable non-volatile memory that permits automatic failure detection and fault location. A manual mode allows testing of unique systems and components. RFTLTS own built-in test provides diagnostics to an easily replaced module, which requires no calibration.

Designed for use in severe environments, the RFTLTS takes advantage of today's technology to meet the need of maintenance crews whether at the factory or in the field.



**DEMONSTRATED RFTLTS AUTOMATIC TEST PASS/FAIL CRITERIA**

**Specifications**

Frequency Range	10 MHz to 18.0 GHz 18-26.5 GHz Expansion (Current) 26.5 - 54.0 GHz Expansion (Planned Growth)
Insertion Loss Measurements Range	70 dB
VSWR Measurement Range	1.12:1 to 11.1 VSWR
Distance-to-fault Measurement Range	0 to 400 ft (122 m)
Reference Data Memory	External Flash Memory
Storage Function Memory	External Flash Memory
Input Power	115/230 Volts, 50, 60 or 400 Hz
Warmup Time	3 Minutes Typical
Typical Path Test Time	1 Minute
Size	RFTLTS < 2.5 cubic ft, Accessory Case < 2.5 cubic ft
Weight	53 lbs
Operating Temperature Range	-40 to +55° C
Environmental Conditions	MIL-T-28800, Type 1, Class 2

**USAF**

A-10A  
AC-130H/U  
B-1B  
B-52H  
C-5A/B  
C-17  
C-130H/J  
C-141 SOLL  
F-15A/B/C/D/E  
F-16A/B/C/D  
F/A-22  
F-117A  
HC-130P  
KC-135  
MC-130 E/H  
MH-53J  
MH-60J

**USA**

AH-64A  
CH-47D  
EH-60A  
MH-47E  
MH-60K

**International**

Italy AV-8  
Japan F-2  
Korea F-16  
Kuwait F-18  
Singapore E-2C  
Taiwan F-16  
Thailand F-18  
UK Tornado  
UK Harrier

**USN**

AV-8B  
E-2C  
EA-6B  
E/P-3C/E  
F-14  
F-18A/B/C/D



**FOR MORE INFORMATION CONTACT:**

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