

## AN/TRC-170(V) Radio Terminal Set

Status: STD-To be determined; NSN: To be determined

Reference: Not Available

### General Information

The AN/TRC-170 provides tactical multichannel digital troposcatter or LOS systems for transmission of analog and digital traffic. It can terminate one system. It is deployed at hybrid nodes for internodal and extended range (skip node) communications. The AN/TRC-170(V)2 replaces the AN/TRC-132 troposcatter radio set. The AN/TRC-170(V)3 replaces the AN/TRC-112/121 troposcatter radio sets.

### Major Components

1 Radio Set AN/GRC-197	1 DSVT KY-68
1 Digital Data Group Modem MD-1026( )/P/G	1 VINSON TSEC/KY-58
2 Loop Group Multiplexers TD-1235( )/TTC	1 ETD KYK-13
1 Trunk Group Multiplexer TD-1236( )/G	1 Antenna System 3 m (9.5 ft)
1 Low Speed Cable Driver Modem MD-1023( )/G	1 (or QRA) Antenna System 3 m (9.5 ft)
1 Environmental Control Unit	1 Voice Orderwire Control Unit C-10602/TRC-170
2 Trunk Encryption Devices TSEC/KG-81	2 High Power Amplifiers (2 kw) ((V)2)
2 Dedicated Loop Encryption Device TSEC/KG-84	1 High Power Amplifier (2 kw) ((V)3)
	1 TROPO Modem OM-61/TRC-170
	2 Synthesizers SN-531/TRC-170 ((V)2)
	1 Synthesizer SN-531/TRC-170 ((V)3)
	1 High Wind Kit 951-211-1

### Technical Characteristics

Number of Channels-----	8 to 144
Data Rates-----	128 to 4,096 kb/s
Frequency Range-----	4.4 to 5.0 GHz
Power Output-----	2 kw
Diversity-----	(V)2: Quad or Dual; (V)3: Dual
Bandwidth-----	(V)2: 3.5 or 6 MHz; (V)3: 3.5 or 7 MHz
Range-----	(V)2: 241 km (150 mi); (V)3: 161 km (100 mi)
Power Requirement-----	120/208 V AC; 50/60/400 Hz
Weight-----	(V)2: 3,859 kg (8,500 lb) (with shelter)
	(V)3: 2,656 kg (5,850 lb) (with shelter)
Shelter-----	Modified S-280; (V)3: Modified S-250

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