

# **TACAN Test Set Datasheet**

#### Description

The TR-100AF TACAN Test Set provides the operator with an easy to use, ruggedly designed ramp test set used for verification of airborne TACAN Transmitter Receivers.

#### Highlights:

- $\Box$  Ground to Air (G/A), Air to Air (A/A), and Air to Air Beacon (A/A BCN) Modes
- ☐ Inverse Mode, North Reference Trigger (NRT) (A/A, G/A)
- ☐ T/R(X,Y) Inverse pulses, 15Hz AM mod,2700Hz squitter, 1350Hz Ident+equalizer pulses, (NRT)
- □ Covers entire frequency range from Channels 1 thru 126 X and Y
- □ Accurate Power and Frequency measuring capability\*\*
- Numerous Heading and Range Selections available
- ☐ Tel-Instrument Standard 2 year warranty included



P/N 90 000 130 NSN: 6625-01-578-4893RH

The TR-100AF features a large backlit LCD display, combined with easy setup menus and user-friendly controls, make the TR-100AF effortless when conducting quick and accurate tests of airborne TACAN equipment. The Direct Connect feature provides precise measurements of power, frequency, and sensitivity, and sensitivity, and sensitivity, and sensitivity, and sensitivity. no external attenuator is required.

#### **Features**

\*\* Denotes A/A Mode Only

- Modes: Ground to Air (G/A), Air to Air (A/A), Air to Air Beacon (A/A BCN), Inverse Mode (A/A, G/A)
- North Reference Trigger at BNC connector on the front (NRT)
- Selectable Bearings from 0 to 359° in 1° increments in Air to Air Beacon (A/A BCN) and Ground to Air (G/A) modes
- Selectable ranges of 0 to 350 nmi. in 1 nmi. increments
- Selectable velocity adjustments of 120 to 1200 knots in 10 knot increments
- Built in diagnostic Self Test
- Battery allows 8 hours of operation before recharge (25% Duty Cycle)
- Built in Battery Charger, 100 to 240 VAC, 50 to 400 Hz
- Rugged and weather resistant case
- Direct Connect Mode and Omni-Antenna interconnects
- Pass/Fail criteria based on stored parameters
- IDENT Morse Code audio transmitted
- Standard 2 year limited warranty

## Specifications

Test Set Transmitter\*

Frequency Range Frequency Accuracy Power Out Bearing Accuracy Range Accuracy

Velocity Accuracy Antenna

Test Set Receiver\*

Freq Measurement Range Freq Measurement Accuracy Power Freq Measurement Range Power Measurement Accuracy Sensitivity Reply Efficiency Settings Efficiency Accuracy 962 to 1213 MHz

± 10 kHz

2 dBm ±3 dBm (@ Ant Port)

± 1° typical, ± 2° max.

± 0.5 nmi. Typical, ± 1.0 nmi. max.

± 3%

**Omni-Directional** 

Selected Frequency ± 3.5 MHz ± 200 kHz 47...64dbm ± 2 db (direct connect) 47...64dbm ± 3 db (antenna to antenna) < -35 dBm (Ant port)

Selectable 25%, 50%, 75% & 100% inc.

± 1% (A/A)

\* Indicates Standard Condition Values as outlined in Maintenance Manual

## **Physical**

Packaging
Size
Weight
Temperature, Operating Limits
Battery Type/Life
Battery Charger/Power

MIL-PRF-28800F 14.5 x 9.4 x 8 inches 18 pounds -28°C to +55°C Lead Acid / 8 hours at 25% duty cycle Built-in / 100 to 240 VAC, 50 to 400 Hz

#### Accessories

- AC Power Cord
- Direct Connect Coax
- Omni Antenna
- Operational with Maintenance Manual



Leading the Avionics Test Set Industry into the 21st Century!