## THALES

# TRC6730 20 Watt Tactical Repeater for the AN/PRC-148 JEM and PRC6809 Radios



## TRC6730 20 Watt Tactical Repeater

The Tactical Repeater is a suitcase configuration that houses two Vehicle Adapters functioning together as a repeater. Integrating two AN/PRC-148 JEM or PRC6809 handheld radios, it significantly increases the performance range of VHF/UHF radio net operations when extended radio linkage is required or where obstacles are present that normally preclude line-of-sight communications. The Tactical Repeater provides 20 Watts transmit power in dual antenna configuration and allows internal battery backup using two rechargeable Lithium-ion batteries. It is capable of supporting both



voice and data, secure and clear operation. Repeater mode will retransmit cryptographic signals but will not decrypt signals. Base station mode supports encrypting/decrypting signals. Commonality of components and the proven core Vehicle Adapter Amplifier platform enable increased range performance.

#### **Key Features**

- ➤ Contiguous 30–512 MHz Coverage
- ▶20 Watt RF Output
- ➤ Repeater Mode and Base Station Mode
- ➤ Rugged Transport Case
- ➤ Bi-directional Operation for Simplex, SINCGARS and ECCM Net Linking
- ➤ Removable Control Heads for Full Function Remote Operations
- Selectable AC and DC Power Input with Rechargeable Backup Battery

#### **Physical Parameters**

**Height:** 11.7 inches (29.72 cm)

Width: 24.6 inches (62.48 cm)

**Depth:** 19.7 inches (50.04 cm)

Volume: 5702.4 cubic inches (93445.6 cc)

Weight: 82 pounds (37.2 kg)

### **Technical Specifications**

**Environmental Specifications** (with back-up batteries installed)

Operating Temperature:  $-20^{\circ}$  to  $+55^{\circ}$  C

Storage Temperature:  $-20^{\circ}$  to  $+60^{\circ}$  C

(without back-up batteries installed)

Operating Temperature:  $-31^{\circ}$  to  $+55^{\circ}$  C

Storage Temperature:  $-31^{\circ}$  to  $+60^{\circ}$  C

Humidity: 95% non-condensing

Rain, Shock/Vibration, Sand and Dust,

Salt Fog: MIL-STD-810G

**Altitude:** 15,0000 feet (4572 meters)

**Drop:** 1.64 feet (1/2 meter)

#### **Transmit Output Power**

5 and 20 watts FM

20 watts PEP AM

5 and 20 watts PSK

#### **Input Supply**

13-32 VDC

90-132 VAC or 180-264 VAC (47-63 Hz) Battery backup for 2 hours at 75:25 duty cycle

#### Reliability

(without radio installed)

**MTBF**: > 2500 hours

**MTTR:** ≤ 45 minutes

#### **External Controls**

Power, ON/OFF, RF output power, mode select, head set volume in base station mode

One touch, on-demand power source/

battery state of charge

#### **Indicators**

Transmit, receive, power, fault-battery state of charge and power source

#### **Receive Sensitivity**

Typical - 115 dBm FM receive sensitivity

#### **Automatic Rate-Selected Reclocking**

Supports 12 and 16 kbps signals

Supports SINCGARS frequency hopping

Specifications are subject to change without notice.

