



TRICOM
RESEARCH, INC.

TCR-HHR-05

Tactical Handheld Radio Communications System

The TCR-HHR-05 is designed as a fly away communications kit for use with the Harris AN/PRC-152 Multi-Band Radio. It allows an operator to rapidly install up to four Line of Site or SATCOM communications links virtually anywhere to include military and commercial vehicles. The compact case holds four TCR-MBA-50 Multi-Band RF amplifiers, two TCR-SPK-02 Amplified Speakers, an AC-DC power adapter, an RF switch that allows automatic selection of the power amplifier output port to the antenna port based on the mode of operation. External connections are provided for RF Antenna, Ethernet (for VOIP), radio KDU/USB and speaker remote power/audio.

Part # 11000-00831



FEATURES

- 10 - 50 Watts Transmit Power
- Auto Frequency Selection
- Auto Power Amplifier RF Output Port Selection
- Ability to connect an external Integrated Voice Over IP (VOIP) Gateway Router
- Highly Portable
- Multi-Band 30-512Mhz
- Dual Net Amplified Speakers

POWER AMPLIFIER TRANSMIT SPECIFICATIONS

SATCOM MODE

Frequency Range
Switching Speed
Modulation
RF Power Input
RF Power Output

SATCOM PERFORMANCE

292-318 MHz
JITC DAMA and IW compatible
FM or Phase Modulation
2-10 Watts (20W without damage)
BA-5590 (12.7 VDC 4.5 A max): 10, 15, 20 Watts
BB-2590 (15 VDC 4.5 A max): Commercial 10, 15, 25 Watts
Vehicle (13.5 VDC 5.5 A max): Military 10, 15, 20 Watts
Vehicle (28 VDC 6.5 A max): 10, 15, 25, 35, 50 Watts

LOS/WB MODE

Frequency range
Modulation
RF Power Input
RF Power Output

LOS/WB PERFORMANCE

30-512 MHz with Automatic Frequency Detection/ WB 225-450 MHz
AM, FM or Phase Modulation, AM/FM Frequency Hopping and ANW2/SRW
2-10 Watts (20W without damage)
BA-5590 (12.7 VDC 4.5 A max): 20 Watts
BB-2590 (15 VDC 4.5 A max): Commercial 20 Watts
Vehicle (13.5 VDC 5.5 A max): Military 25 Watts
Vehicle (28 VDC 6.5 A max): 25 Watts, 50 Watts (LOS only)

POWER AMPLIFIER RECEIVE SPECIFICATIONS

SATCOM MODE

Frequency range
Noise Figure
Receive Gain

SATCOM PERFORMANCE

242-268 MHz
3.75 dB Typical
10 dB or LNA Bypass

LOS MODE

Frequency Range
Insertion Loss
VSWR

LOS PERFORMANCE

30-512 MHz
< 1 dB
2.5:1 Max

WB PERFORMANCE

225-450 MHz
< 2.5 dB
2.5:1 Max

SYSTEM GENERAL SPECIFICATIONS

Antenna Connectors BNC Female
AC Connector MS3112E12-3P
Speaker Connectors DE15 Female
High Temperature Power Amplifier High Temperature Indication/Fold back
AC Input 90-260 VAC, 50/60 Hz
DC Off Radio RF Connectors Routed to Antenna Connectors
Cooling Natural Convection
Dimensions 7.2" H x 20.5" W x 11.5" D
Weight 62 Lbs (without radios)