

# C-130 PACT Multi-Purpose Hatch System (MPHS) SATCOM Solution

# PACT

Portable  
Airborne  
Com  
Terminal

R4 Integration, Inc. has designed, built and successfully tested the new generation Roll-On/Roll-Off (RO/RO) portable communication solution which provides the full frequency range capability of the PRC-117G radio. It offers unmatched flexibility as it can operate as a stand alone or fully integrated solution on an aircraft, ground vehicle or base station. This complete turnkey solution features full 30—2000 MHz LOS, BLOS, Voice/Data capability that integrates into the aircraft's intercom system which allows for multi-operators, and ground vehicle station communication. PACT is one complete radio communications suite that installs quickly and without modifications to the aircraft. Combined with R4's MPHS, it is the premier solution on the market today.



#US 9,016,631 B2, FAA STC #ST02495LA  
and DoD certified.

## TECHNICAL INFORMATION

PRC-117G

30—2000 MHz AM/FM,  
SATCOM/DAMA, SINCGARS,  
HAVEQUICK, HPW, ANW2,  
ROVER, SCM, GPS

TRANSMISSION  
SECURITY

Vinson, ANDVT, AES,  
FASCINATOR, KG-84C Embedded

MECHANICAL

Height: 24" / Weight: 48 lbs



850.226.6913  
[info@r4-integration.com](mailto:info@r4-integration.com)

R4 MPHS #: 0009A3000-10-190  
R4 PACT PART #: 0015A3000



**L3HARRIS**™

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## ANTENNA KEY FEATURES

- BILLET ALUMINUM CONSTRUCTION
- NO MODIFICATION TO AIRCRAFT
- FIELD REPLACEABLE SEALS AND HARDWARE
- HI ANGLE UHF SATCOM & MUOS COVERAGE
- CONTINUOUS LO ANGLE FREQUENCY COVERAGE, 30-2000 MHz
- L1 AND L2 GPS
- FAA/DoD CERTIFIED

## SPECIFICATIONS

### FREQUENCY

UHF Hi Angle : 240 - 385 MHz  
V/UHF/L-Band Lo Angle : 30 - 2000 MHz  
GPS: L1: 1564 - 1587 / L2: 1216 - 1239 MHz

### GAIN (TYPICAL)

Hi Angle : +6.5 dBiC @ Zenith  
Lo Angle : -18.5 dBi @ 30 MHz  
-8.0 dBi @ 88 MHz  
-1.0 dBi average 118-174 MHz  
+1.0 dBi average 225 - 2000 MHz  
GPS: +4.0 dBiC @ Zenith

### RF POWER

Hi Angle: 200 Watts CW  
Lo Angle: 50 Watts VHF / 200 Watts (225-2000 MHz)  
GPS: 1 Watt

## RF AMPLIFIER SPECIFICATIONS

- Transmit amplification for the 30-512 MHz frequency range
- 5 co-site filtered receive bands: 30-512 MHz, 30-118 MHz, 118-174 MHz, 174-512 MHz, and 240-270 MHz
- Low Noise High Dynamic Range Receive Pre-Amplifier (LNA) for all bands
- 3 user-configurable antenna ports: Line of Sight (LOS), SATCOM (SAT), Wideband (WB)
- 30 MHz - 2.7 GHz bypass path to all antenna ports
- Carrier Detect Keying and Automatic Frequency Detection
- UHF SATCOM, DAMA/IW
- SINCGARS, HAVEQUICK II, and SATURN
- ANW2C and SRW Wideband Networking
- Tactical Waveforms mode for advanced waveforms
- Advanced Special Communications Mode (ASCM)
- RS-485, USB, and Ethernet connectivity for end-user devices and optional Remote Face Plate and Bias Tee
- Simple, 3-button menu-based user interface
- Night Vision Goggle (NVG) compatible display
- MIL-STD-810G, MIL-STD-461, MIL-STD-464 (Near Strike Lightning)
- Excessive temperature, voltage, and current protection

### SUPPORTED WAVEFORMS BYPASS TO L-BAND

ANW2C, SRW, TACTICAL WAVEFORMS

### ANTENNA

Typical Insertion Loss UHF 1.75 dB, 1.0-2.0 GHz  
2.5 dB, 2.0-2.6 GHz 3.0 dB (typ.)

### ALL MODES

RF Power Input 1-5 W (10 W w/out damage)  
RF Power Output LOW, MED, HI (UHF 25, 35, 50 W;  
L-Band 10, 15, 25 W)

Receive Gain 6 dB

Typical Noise Figure UHF 3.5 dB, L1 4.5 dB, L2 5.5 dB

### DIMENSIONS

2.5" H x 3.5" W x 8.15" D (incl. connectors)

### WEIGHT

3.7 lbs



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