

## **FALCON<sup>®</sup> IV AN/PRC-158**

### **Multi-channel Manpack (MCMP)**

The L3Harris Falcon IV AN/PRC-158 delivers dual-channel connectivity across the full 30-2500 MHz frequency range. Compact and lightweight, the MCMP provides forward-deployed warfighters with an unrivaled level of tactical communications flexibility.



Equipped with a Software Communications Architecture (SCA) and a broad portfolio of narrowband, wideband and fast-hop resilient waveforms, the AN/PRC-158 ensures continuous communications, advanced interoperability and is software upgradeable for new capabilities. The manpack's two channels and superior routing and crossbanding technologies support communications redundancy and critical voice and data sharing with a variety of nets.

The MCMP includes MUOS-ready hardware for SATCOM connectivity while on the move. NSA-certified for voice and data up to U.S. TOP SECRET with L3Harris Sierra™ II encryption, the manpack is fully JTRS COMSEC and TRANSEC compliant. The AN/PRC-158 supports numerous encryption and key fill modes as well as Type 3 AES keys.

The familiar Falcon user interface reduces training time and speeds tactical operations. An embedded SAASM GPS receiver enhances situational awareness through automatic position location reporting.

The AN/PRC-158 is the first Falcon IV product that supports ARROW, L3Harris' new resilient waveform. ARROW is a 30-512 Mhz fast-hopping line-of-sight waveform that is designed to operate in congested and highly contested environments.

RT-2034D will support airborne features such as Discrete Zeroize, HaveQuick Time of Day (HQ TOD), and Squelch status.



### **TYPE 1 SECURITY IN A VERSATILE TWO- CHANNEL MANPACK**

#### **KEY BENEFITS**

- > Dual-channel simultaneous send and receive capabilities
- > Software-defined architecture is upgradeable
- > MUOS capable for SATCOM on the move
- > NSA-certified for voice and data up to U.S. TOP SECRET

GENERAL	
RT Nomenclature	RT 2034C P C U, RT 2034D P C U
Frequency Range	30 MHz-2.5 GHz Narrowband: VHF: 30-225 MHz UHF: 225-520 MHz, 762-874 MHz SATCOM: RX: 243-270 MHz TX: 292-318 MHz MUOS: RX: 360-380 MHz TX: 300-320 MHz Wideband: UHF: 225-520 MHz L-BAND: 762 MHz-2.5 GHz
Channel Spacing/Bandwidth	Narrowband: 8.33 kHz, 12.5 kHz, 25 kHz Wideband: 1.2 MHz, 2.5 MHz, 5 MHz and 10 MHz FM Deviation: 5 kHz, 6.5 kHz, 8 kHz
Net Presets	99 system presets per channel
Internal GPS	SAASM receiver (commercial GPS optional)
Management Tool	Communications Planning Application (CPA); JENM compatible, ATOM
Frequency Tuning	10 Hz from 30-520 MHz 100 Hz from 762 MHz-2.5 GHz
Software Environment	SCA v2.2.2

TRANSMITTER	
Power Output	Narrowband: 10 W SATCOM: 20 W Wideband: 20 W peak/10 W average (max)
Antenna Outputs	Single 30-2500 MHz N-type connector per channel
Harmonic Suppression	> 53 dBc
Frequency Stability	0.5 ppm
Spurious Suppression	> 53 dBc

RECEIVER	
Sensitivity (for 10db SINAD)	LOS FM 30-512 MHz: -116 dBm LOS AM 90-512: -103.5 dBm with 30% modulation
Adjacent Channel Rejection	> -40 dB
Squelch	Digital (CDCSS or CTCSS), tone, noise or none

POWER	
Power Input	19-34 VDC
Power Consumption	120 W max
Battery Types	BA-5590/U, BA-5390/U, BB-2590/U

SECURITY	
Encryption	Sierra™ II-based, Type 1 (Suite A/B) NSA Certified TOP SECRET and below
Encryption Modes	KY-57 (VINSON), KYV-5 (ANDVT), KG-84C, FASCINATOR, HAIPE (PPK, APPK, FFV), AES (Type 1 & 3), TSVICIS
Key Fill Device Compatibility	AN/CYZ-10 DTD, KOI-18, KYK-13, KYX-15, MX-18290, AN/PYQ-10, KIK-11, KIK-20
Key Storage	Up to 300 per channel
Modes	DS101, DS102, mode 2/3, USB

MODES AND WAVEFORMS	
Narrowband Waveforms	AM/FM, ARROW, HAVEQUICK I/II, HPW, SATURN, SINGGARS, VHF/UHF LOS
Wideband Waveforms	ANW2®, ANW2®D, WREN-TSM™*
UHF SATCOM Waveforms	MIL-STD-188-181B dedicated channels MIL-STD-188-182A, 183A DAMA MIL-STD-188-181C, 183B, IW Phase 2 HPW, MUOS
Voice and Data Modes	Simplex or half duplex MIL-STD-188-113 CVSD STANAG 4198 LPC-10e STANAG 4591 MELPe Full duplex capable
Transmission Modes	AM, ASK, FM, FSK, PSK, CPM, GMSK

PHYSICAL	
Dimensions (no handles)	3.50 H x 7.36 W x 9.51 D in (without battery) 3.50 H x 7.36 W x 14.25 D in (with battery)
Volume	181 in <sup>3</sup> (without battery) 264 in <sup>3</sup> (with battery)
Weight	8.9 lbs (without battery) 12.7 lbs (with battery)
Color	CARC green 383

ENVIRONMENTAL	
Shock/Vibration	MIL-STD-810G for tracked and wheeled vehicles, ADTP-2404D ballistic shock
Immersion	2 meters salt water (MIL-STD-810G)
Temperature	Operating: -40°F to 131°F (-40°C to +55°C) Storage: -40°F to 160°F (-40°C to +71°C)
EMI/RFI	MIL-STD-461F
Sand/Dust/Salt/Fog/Rain	MIL-STD-810G

INTERFACES	
External Data	USB, USB RNDIS host and device, Ethernet, RS-232
Audio	Standard 6-pin per channel
Antenna Port	Single N-type connector per channel
Programming	Communications Planning Application (CPA); JENM compatible, ATOM
Function Knob	OFF, ON, LD, Z
Remote Control	USB, RS-232, Remote Keypad Display Unit (RKDU), Software Keypad Display Unit, SNMP

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