

L3HARRIS FALCON® 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 fast in-field updates for new capabilities. The manpack's two channels and superior routing and crossbanding technologies support communications redundancy and sharing critical voice and data ISR with a variety of nets and sub 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 legacy 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 30Mhz-512Mhz fast-hopping Line-Of-Sight waveform that is designed to operate in congested and highly contested environments.



TYPE 1 SECURITY IN A VERSATILE TWO-CHANNEL MANPACK

KEY BENEFITS

- > **Dual-channel simultaneous send and receive capabilities**
- > **Software-defined architecture supports fast, in-field updates**
- > **MUOS capable for SATCOM on the move**
- > **NSA-certified for voice and data up to U.S. TOP SECRET**

GENERAL	
RT Nomenclature	RT 2034A P C U (SAASM GPS) RT 2034 P C U (commercial GPS)
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, 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	SRW, 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 in3 (without battery) 264 in3 (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 meter 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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