

TRANSPORTABLE SYSTEM

FLYK-150

DTC
A CODAN COMPANY

The FLYK-150 is a transportable ready-to-deploy mobile or base station HF communication system based on the Codan Sentry-H 6120-BM software defined radio (SDR). It is designed as a portable self-contained HF secure voice and data communications system housed in a rugged airline compatible case.

KEY FEATURES

- Rugged rapid deploy design
- Designed for airline transport
- Multiple power source compatibility - AC, DC, or internal battery backup
- Battery voltage readout
- USB charge port
- 150 W RF output power
- 1.6 – 30 MHz frequency range
- Intuitive colour, multi-lingual graphical user interface, and USB Smartloader
- Standards based:
 - MIL-STD-188-110A/B (STANAG 4539) Data (up to 19k2 bps)
 - FED-STD-1045
 - MIL-STD-188-141B ALE (JITC certified)
 - 3G ALE (STANAG 4538)
 - AES-256 / CES-128 COMSEC
- Wide range of supported peripherals
- ECCM
- Worldwide service and support

RUGGED AND RAPID DEPLOY

The FLYK-150 is a rugged, compact, and powerful long-range voice and data radio communications system that ensures maximum mobility and quick deployment while also being easy to carry and store. The FLYK-150 has been carefully designed to meet international airline regulations for checked in luggage. With its compact form factor and full Codan Sentry-H 6120-BM capability set, the FLYK-150 provides continuous reliable communication in a wide range of rapid deploy base and mobile applications.

The FLYK-150 is fully self contained and operates from a wide range of AC mains voltages, external DC input, or an internal back up battery to provide short term operation while the AC mains / external DC power sources are unavailable. Low battery voltage cutoff protection circuit is included to ensure battery longevity and continued performance.



EASE OF USE

With the Codan Sentry-H 6120-BM SDR at the heart of the FLYK-150, ease of use is assured. The handset form factor, smart icon driven menu system, and multi-lingual user interface ensures that requirements for training and familiarisation on the equipment is minimised, enabling critical resources to be focussed on the communications that the mission requires.

With a dual USB port facility, ancillary devices such as tablets, laptops, or smartphones can be easily charged from the FLYK-150 unit.

SECURE DIGITAL VOICE AND DATA

The Sentry-H 6120-BM is a full systems capable HF radio covering the full spectrum of secure voice and data communications, and includes the ability for configuration with FED/MIL-STD ALE, STANAG 4538 3G ALE, MIL-STD-188-110A/B data, AES-256 voice and data encryption, and CES-128 voice encryption. With 150W power output, exceptional receiver performance, and Codan's industry leading second generation Digital Voice, you can be assured of clear communications.

The FLYK-150 includes access to the general purpose accessory interface of the embedded Sentry-H 6120-BM SDR. This can be utilised for connection of external crypto devices, tablets, or laptops running data, radio programming applications, or other external accessories.

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CAPABILITY EXPANSION

Codan's Sentry-H 6120-BM uses the latest-generation high-performance Digital Signal Processor (DSP), Field-Programmable Gate Array (FPGA) and system on chip (SoC) technology.

Built upon a proven SDR platform with thousands of hours of operation in the field, the Sentry-H 6120-BM delivers market-leading performance and future upgradability through software updates that support evolving standards and ensure sustainability. A GPS receiver accessory and optional GPS calling options can also be selected to provide location and tracking capabilities.

Additionally, the FLYK-150 can be interfaced to the Codan RIOS interoperability product suite, providing a powerfully scalable interoperable communications solution.

HF RADIO SPECIFICATIONS

Channels and scanning	Up to 1000 simplex or semi-duplex Up to 20 scan groups Simultaneous scanning for Selcall (ALE / CCIR) and voice Dwell time 125 ms to 9.9 s, adjustable
Contacts list	Up to 500 entries
Compliance	CE, FCC Part 90, AS/NZS 4770, AS/NZS 4355, IC RSS-125
Frequency range	Transmit: 1.6 to 30MHz Receive: 250 kHz to 30MHz
Modes	Single Sideband USB, LSB (J3E), AM (H3E), CW (J2A), AFSK (J2B), FSK (F1B), ISB (B7D or B2B), Software Defined
RF output power	150 W PEP $\pm$ 1 dB (two-tone or voice), user-programmable in 1W steps (low / medium / high)
Interfaces	USB programming port via 2320 Smart Handset
Language support	Multiple language user interface and documentation
Automatic Link Establishment (ALE)	FED-STD-1045; JITC Certified MIL-STD-188-141B; STANAG 4538 3G ALE
Data	MIL-STD-188-110A/B (STANAG 4539) data capability with data rates up to 19k2 bps
Selcall	CCIR 493-4 proprietary and open standard
Digital Voice	TWELP: 2400 bit/s, 1200 bit/s, 600 bit/s, 480 bit/s, 300 bit/s MELPe (STANAG 4591): 2400 bit/s, 1200 bit/s
ECCM	6/12/25 hops per second

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

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GENERAL SPECIFICATIONS	
Interfaces	Dual USB-A charge port Auxiliary GPIO (19way MIL-C-26482, audio in/out, PTT, RS232) External DC input (2 pin Anderson SB50) Solar panel Input (2-pin Anderson Powerpole) RF input output (50 Ω N-Type) Antenna control port (Socket, 6way MIL-C-26482) AC mains input (IEC-C14 fused panel mount plug)
Controls and indicators	DC isolation switch Battery charge voltage digital readout USB charge port active LED
Duty cycle	100% Voice / Data
RF output impedance	50 Ω
GPS	Embedded receiver/antenna (GPS and GLONASS)
AC operating range	100 to 240 V AC $\pm$ 10% (50 / 60 Hz)
External DC input	11-35 V DC
Protection	AC surge protection / over-voltage / under-voltage / over-temperature DC short circuit – 30A fuse, user replaceable, automotive style
Temperature range	-30°C to +60°C; 95% RH maximum, non-condensing
Back up battery	12V / 8Ah sealed Gelcell
Battery life	Up to 2 hours – subject to operational specifics
Dimensions	55.9 W x 35.1 H x 22.9 D cm (22.0 x 13.8 x 9.0 in)
Weight	20.7 kg (45.6 lb)
Sealing	O-Ring Seal, splash proof with lid closed and latched

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