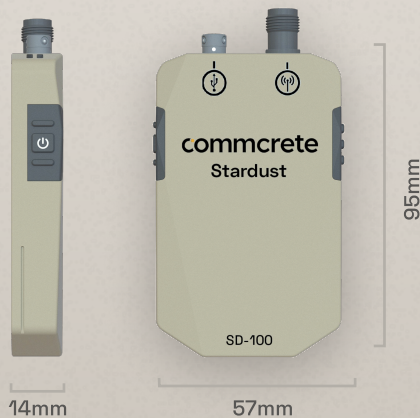


Stardust – SD Series

Tactical Multi-Channel L-Band SATCOM Radio



SD - 100 Handheld



SD - 200 Mobile

Stardust by Commcrete is a compact, tactical multi-channel L-Band two-way satellite radio, designed for reliable connectivity beyond the line-of-sight range networks.

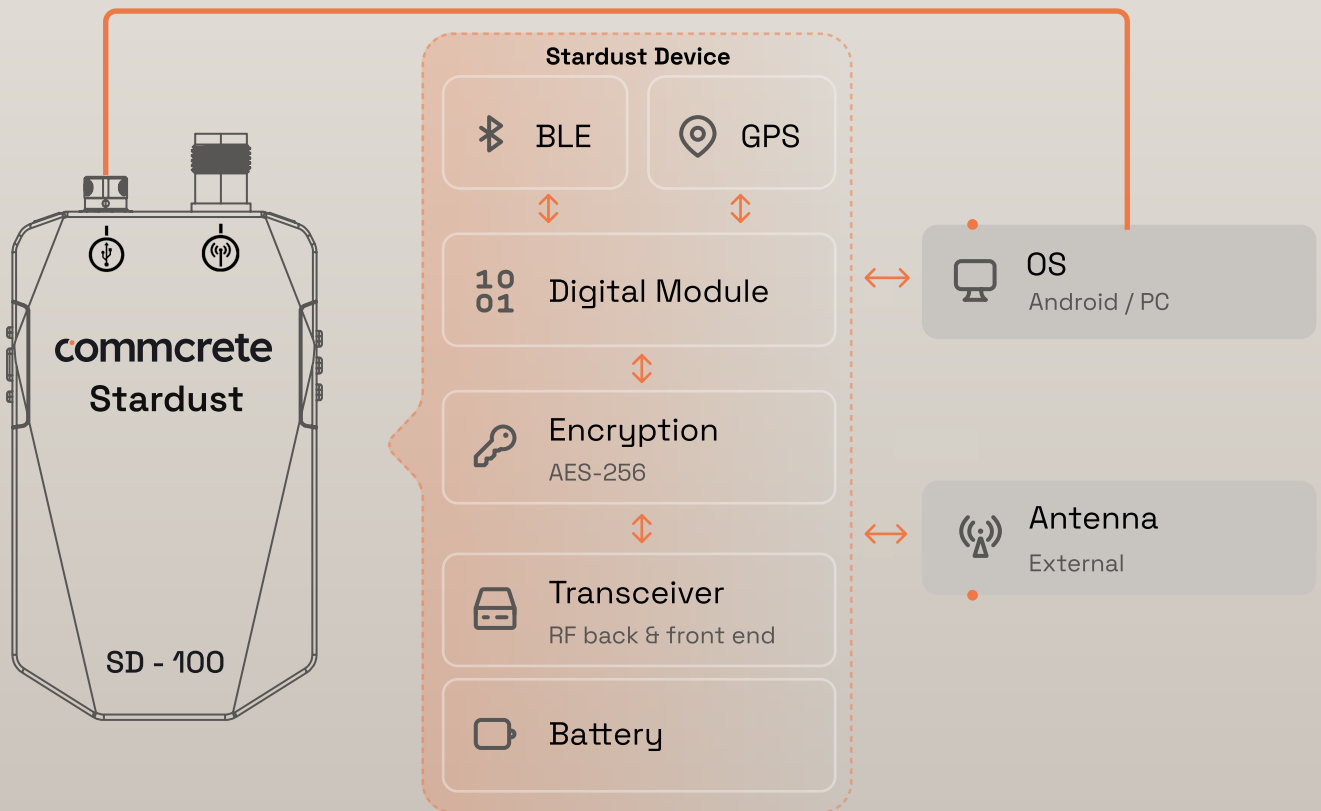
Stardust provides Data, Text, GPS (Blue Force Tracking), SOS and PTT Voice communication over satellite, allowing multiplex reception. Stardust works both as a standalone transceiver or fully integrated to an android / pc platform.

Leveraging the global coverage of GEO satellites, Stardust offers tactical users around the world a real-time connectivity solution that is both flexible and versatile. It fits to a various scenarios of field-user oriented comms, making it easy to carry, mount and operate.

Handheld version (SD-100) and mobile version (SD-200) are available for various use cases. Electrical and mechanical design allow each version its unique advantages by offering seamless integration with different types of environments and physical interfaces. SD-301 model brings a modified version for HQ, taking Stardust network efficiency to its top.

Stardust complies with L-Band tactical services by GEO satellite companies, making it invincible in size and performance. It excels in challenging environments and enable users a flexible solution for on-the-move data transfer, regardless of being directional to the satellite or being disturbed by a tied-up link margin.

Stardust Architecture



Stardust Features

Stardust holds a few capabilities shared over satellite within the Commcrete Tactical Network:

📍 BFT - Blue Force Tracking
📞 SOS - emergency messages
💬 Text - Free text messages
↕ Data – File transfer
🎤 Voice PTT

Stardust License Grades

STA Situational Team Awareness	C4I
✓	✓
✓	✓
	✓
	✓
	✓

* Stardust is a standalone device when basic features such as BFT and SOS are utilized.

* Advanced functionality of Text Messaging, File Transfer and Voice PTT require a supportive user interface by an OS (android or PC).

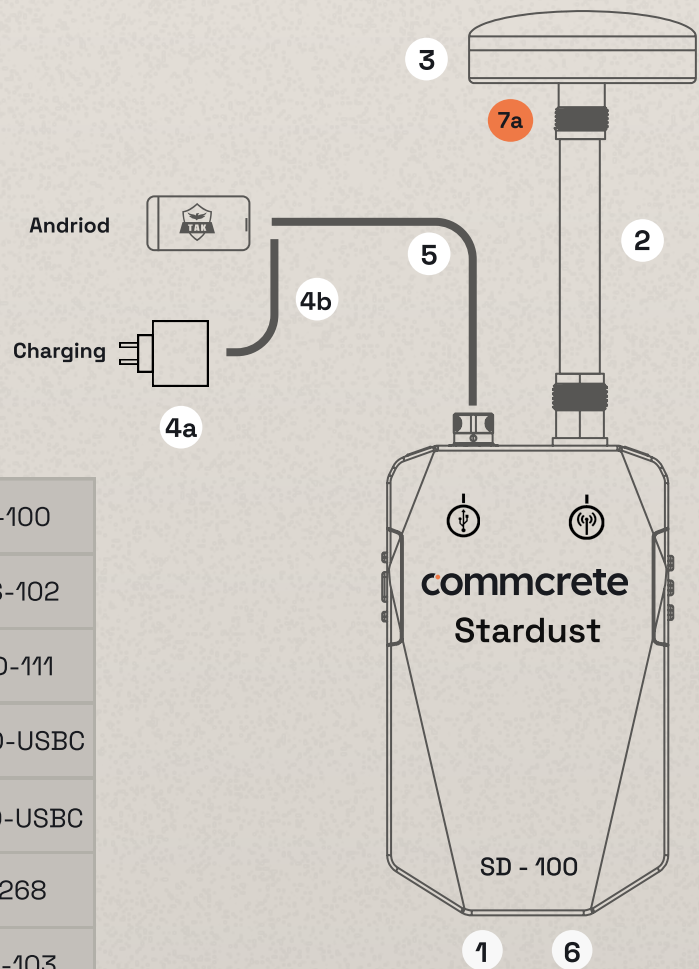
	Handheld Stardust / SD-100	Mobile Stardust / SD-200
Frequency Range	Rx: 1,525-1,559 MHz Tx: 1,626-1661.5 MHz GNSS: L1 BT: 2,400-2,483 MHz	Rx: 1,525-1,559 MHz Tx: 1,626-1661.5 MHz GNSS: L1 BT: 2,400-2,483 MHz
Data Rate	Low Rate: 100 bps Nom Rate: 1 kbps High Rate: 6 kbps	Low Rate: 100 bps Nom Rate: 1 kbps High Rate: 6 kbps
DC Power	Volts Battery: Rechargeable Li-Po Capacity: 550mAh @ 7.4V	9-48 Volts
EIRP	35dBm (Max)	35dBm (Max)
Interface	DC + USB: Fischer Push-Pull RF: TNC	DC + USB: Fischer Push-Pull DC Only: 38999 Amphenol RF: TNC
Environmental	-30°C - +60°C Operation IP67	-30°C - +60°C Operation IP67
Physical	58mm X 88mm X 15mm 130 grams	100mm X 160mm X 30mm 350 grams
Compliance:	CE, FCC	CE, FCC
Encryption	AES-256	AES-256

	Passive Antenna / HTS-111	Active Antenna / VTS-310
Frequency Range	Rx: 1,525-1,559 MHz Tx: 1,626-1661.5 MHz GNSS: L1	Rx: 1,525-1,559 MHz Tx: 1,626-1661.5 MHz GNSS: L1
Gain	L-Band: 0dBic (nominal) GPS: 0dBic	L-Band: 0dBic (nominal) GPS: 0dBic
DC Power	Passive (none)	Active (Over RF)
Interface	RF: TNC	RF: TNC
Environmental	-20°C - +60°C Operation IP67	-30°C - +60°C Operation IP67
Physical	Ø65mm, 100 grams	Ø100mm, 200 grams

Connectivity Options

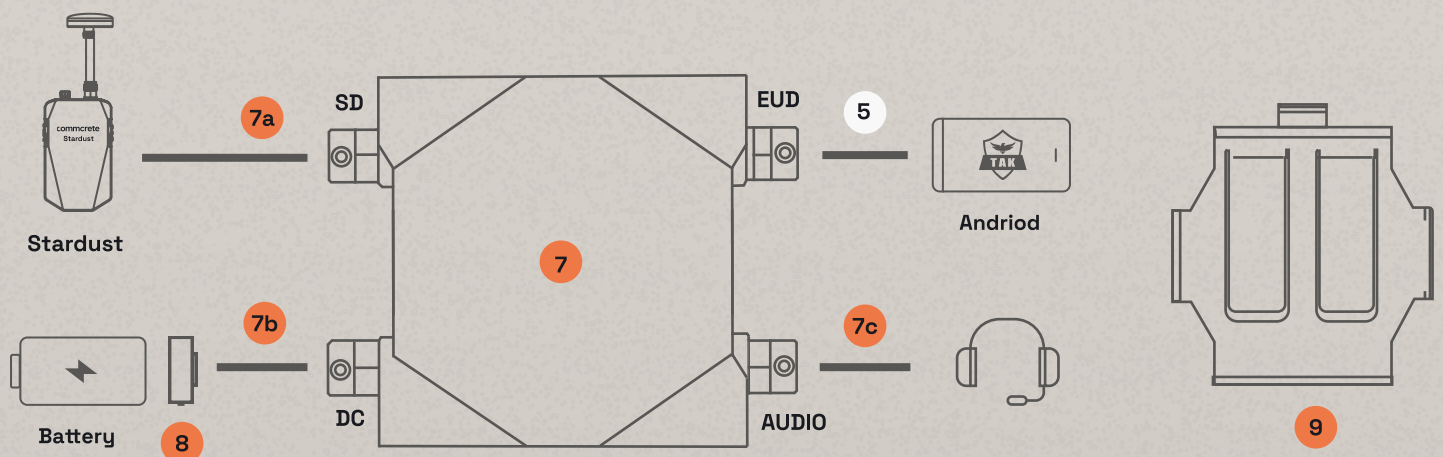
SD-100 Handheld Version

Android controlled / PTT support



1	Stardust Handheld Device	SD-100
2	Coaxial Gooseneck, 24 cm	HTS-102
3	Passive Antenna	HSD-111
4A	220V AC PD Charger, USB-C	AC-PD-USBC
4B	USB-C PD Charging cable assembly adapter	CE-PD-USBC
5	Data / Power Cable Assembly	145268
6	Mounting Bracket	HSD-103

J-Box

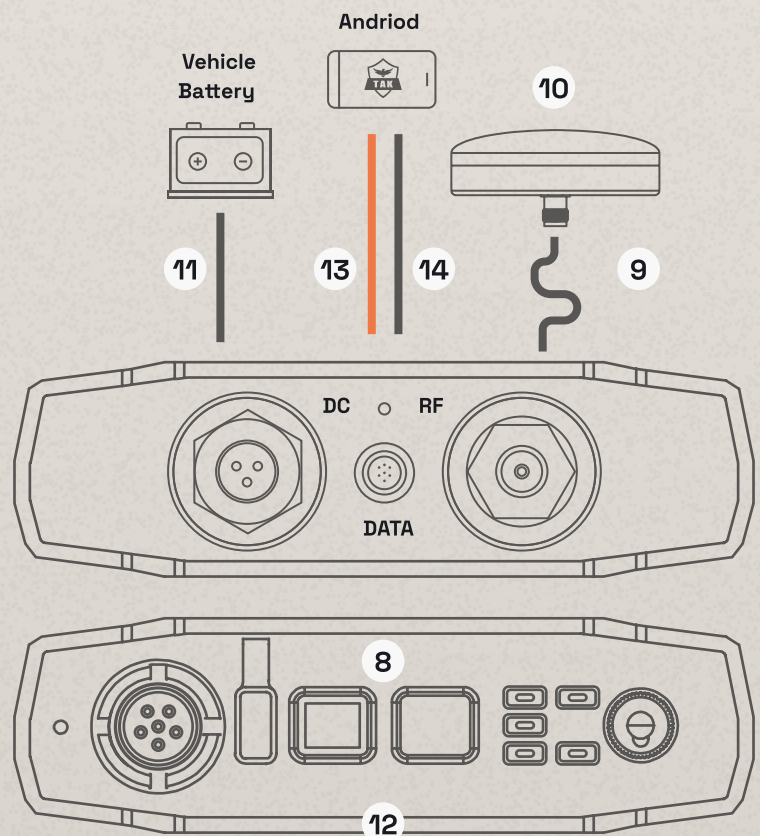


7	J-Box (DC / USB / Audio Hub)	SD-JB	7c	USB Cable Assembly	504251
7a	Power & Data Cable Assembly	145554	8	Battery adapter for PRC-148/152	HSD-120
7b	Power Cable Assembly	145559	9	Mounting Bracket	HSD-303

Connectivity Options

SD-200 Mobile Version

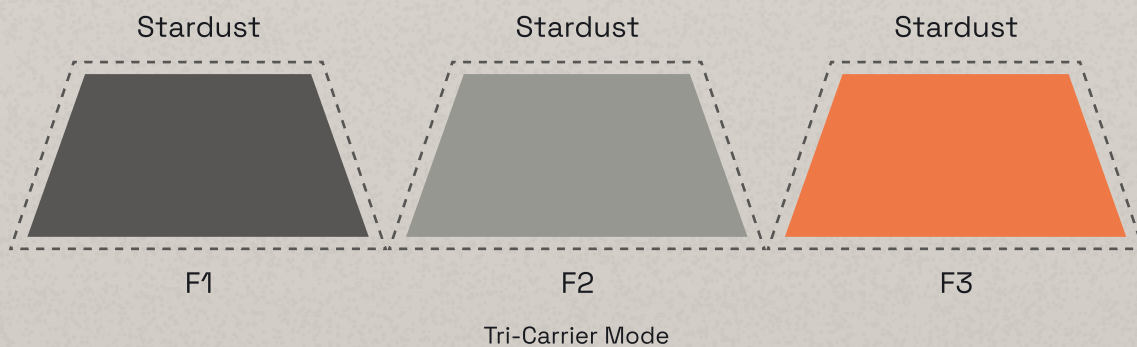
Platform / FOB mounted



8	Stardust Mobile Device
9	RF Cable, 5m
10	Active Antenna
11	Power Cable
12	Stardust Mobile Bracket
13	Data Cable Assembly
14	Power & Data Cable Assembly

Channel Bandwidth

Satellite Channel: 25kHz



Contact us

info@commcrete.com
<https://commcrete.com>