

ForceLITE

ORION 16X16 Ku

Secure satellite communication and control for small, long range, manned and unmanned platforms.



Specifications

Frequency range	TX: 13.75-14.5 GHz RX: 10.75-12.75 GHz
Data capabilities	Typical data rate GEO: 5-2000 kbps Depends on satellite resources
Duplexing Mode	Half Duplex (TDD)
EIRP	Typical: 31 dBW @ 0° scan Typical: 26 dBW @ 60° scan
G/T	Typical: >1 dB/K @ 0° scan Typical: >-3 dB/K @ 60° scan
Tx & Rx polarization	V, H, Electronically controlled
Elevation angle	20° ÷ 90°
Receiver lock time	< 50 msec
Dimensions H / W / D	95 / 550 / 235 mm 3.74 / 21.65 / 9.25 inches
Weight	8 Kg / 17.64 lbs
User interface	One LED (Status), 1 Reset Button
Air protocol	HiSKY proprietary
Encryption	AES-256

Modem Specifications

Modulations	BPSK
FEC	1/3
Sensitivity	$E_b/N_o < 1.5 \text{ dB @ FEC} = 1/3$

Power

DC input range	10-40 VDC
Power consumption (typical)	Standby: < 15W Tx & Rx: < 180W (max)
Power-up options	External discrete on/off

Interfaces

Circular connector 14 pin	DC, Ethernet (10/100BaseT), RS422, Wake up I/O
GNSS (optional)	GPS, QZSS, GLONASS, BeiDou
Ext. IMU data (optional)	Accelerometers & Gyroscope
Networking and protocols	Layer 2 / Layer 3 / Proxy

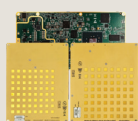
Environmental Conditions

Operational Temperature	-40 °C to +70 °C -40 °F to +158 °F
Dust and water ingress, Vibration, Salt spray	Military grade

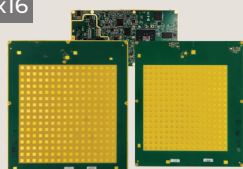
ForceLITE Terminals

On the move satellite communication solutions for air, land and sea.

8x8

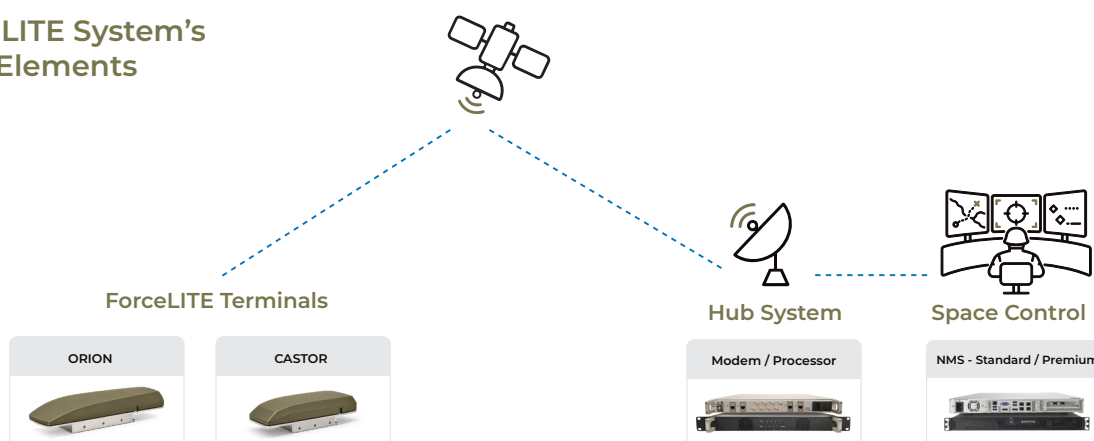


16x16



- ▶ Low Size, Weight, and Power (SWaP)
- ▶ End to End System - connect HQ to all your platforms
- ▶ Sovereign Network capability
- ▶ Private Network - complete control and security of all data transmissions
- ▶ Low Probability of Detection, Low Probability of Interception
- ▶ Fully Operational System already deployed
- ▶ Customized Integration for various platforms

ForceLITE System's Core Elements



Technology Trusted by Industry Leaders

KRATOS

ST Engineering
powered by
Newtec **iDIRECT**

INTELSAT
Now Part of SES

SES

esa
European Space Agency

HUGHES

SPACECOM

UK SPACE AGENCY

SDF
صندوق تنمية
القطاعات الاستراتيجية

nokiwave