Secure VSAT Manpack

powered by SElink™ Secure Virtual Networking

- *Integrated security for improved QoS*
- *Designed for heavy duty applications*
- *High gain flat panel antenna*
- *Compact and integrated flat panel*
- *Portable with backpack*

Security is a mandatory requirement for satellite networks. Satellite technology provides low and limited network bandwidth resulting in network congestion, reduced Quality-of-Service (QoS) of applications and late packet delivery issues. This may cause the loss of synchronisation, therefore a careful evaluation of encryption systems is required to prevent Quality of Service degradation and unnecessary bandwidth consumption due to security processing.

SE*link*™ is a service-oriented, secure, virtual networking solution to protect end-point and network alike.
Able to replicate heterogenous clients and server behaviours in a seamless way, as in a private LAN; when a satellite device is connected to the Terrestrial Network Operation Center (NOC) server through SE*link*™, it is virtually relocated in the same NOC server LAN.
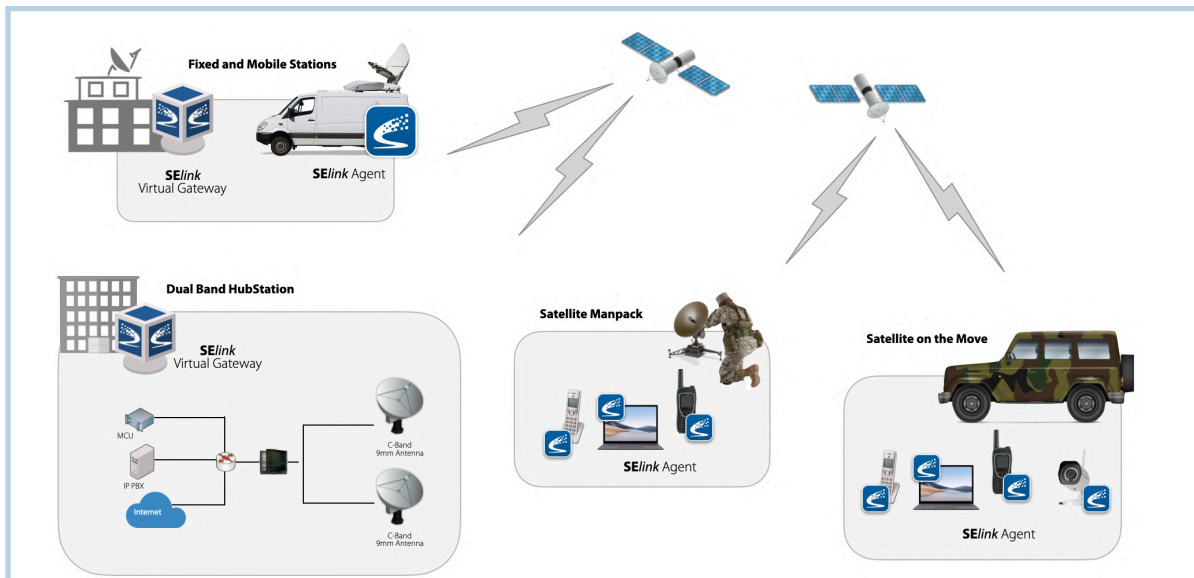
Benefits

1. **Zero Trust Network Access and Assumed Breach model** strategies

2. **Lightweight protocols** for bandwidth sensitive and resource-constrained devices

3. **Low-bandwidth strategies coupled with smart mechanisms** to improve QoS and availability of service

4. **Zero Encryption Overhead** compared to TLS/SSL/IPSec

5. **Free from third-party vendor dependancies** for the integration of security into heterogeneous devices

6. **Seamless encryption updates, redesign-free** through crypto agility

7. **Rationalisation of operational costs:** NO VPN, NO static IP addresses, required

8. **Efficiency and ease of management**

The SElink™ Gateway performs satellite terminals "virtualisation", showing to the server the original MAC address and a unique, registered, identifier for each Satellite device in the network.
The advantages are overwhelming. SElink™ protects both the data channel and the access to the communication channel, which can only be used by authorised processes controlled by Zero Trust Access mechanisms confining malware to its origin. This ensures that the Ground Station server is protected even in the event that the satellite device is compromised, for example in the event of a supply chain attack. Satellite devices no longer need public static IP addresses to the benefit of a reduction of the attack surface as well as operational costs. Lightweight protocols and zero encryption overhead make the integration of security into bandwidth sensitive devices no longer an issue, making resource utilisation efficient, allow the optimal response and guarantee target performance to the most TCP/IP services. Smart mechanisms such as automatic session recovery, packets aggregation over the same packet header and TCP header overhead reduction prevent packet filtering from providers and improve service availability. Easy to integrate in any environment, over any protocol, portable, multi-device with the benefit of crypto-agility, SElink™ security techniques, are resilient and resistant to quantum computing attacks.

Antenna type	Flat Panel Ku Band Antenna	Security	SElink™ Secure Virtual Networking
Power Consumption	45 W - 155W@12-24VDC		Post Quantum Cryptography
Frequency	TX 13.75~14.50GHz	Wireless router	IEEE 802.11b/g/n at 2.4GHz
	RX 10.95~12.75GHz		Access number: 30
Polarisation	Linear Horizontal / Vertical , ±88°		Coverage (Unobstructed):50~100m
RX/TX gain	RX ≥35dBi	Bluetooth	4.2
	TX ≥36dBi	GNSS Supports	GPS/GLONASS/BeiDou-2/Galileo
EIRP	43dBW (6W BUC)	TX Interface	BUC IN F-Type Connector
Tracking accuracy	<0.2°	RX Interface	LNB OUT F-Type Connector
Satellite acquisition	H265 1080 x 720 30fps	LAN	1 RJ45 10/100/1000
Azimuth range	Unlimited, fine tune ±70°		1 RJ45 Modem Debug
Elevation range	7°~ 90°	Debug	SP/SD13-7 Cores waterproof aviation conn
Env. Performances	**wind:** 13.5m/s (49km/h)	Batteries	3~15hours working time (3W BUC) 7
	temperature: -25℃ to +50℃	Dimension	L 680× W 650× H 240 mm
	humidity: 0 ~ 95%	Weight	≤18 Kg (excluding cables and backpack)
		Approvals	FCC, CE, RCM, ANANTEL, INTELSAT

Specifications are subject to change without notice to improve reliability, function or design or otherwise

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