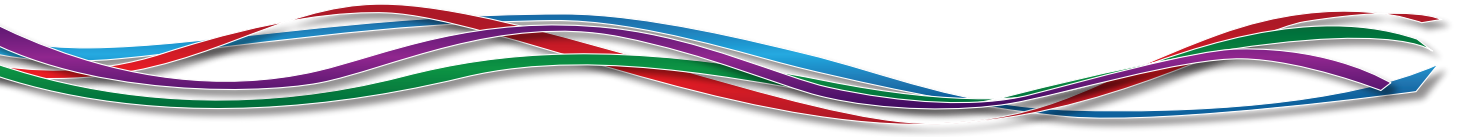# SPECTRA

SHADE™

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SPECTRA Group

Spectra Group (UK) is a leading international provider to Defence & Security, Aid & Emergency and commercial organisations of secure voice, data and satellite communications in locations with limited or compromised infrastructure.

We are experts in the design, delivery, implementation and on-going support for a comprehensive range of satellite communication services.

SHADE™

The Spectra Hostile Area Deployment Environment (SHADE™) enables rapid deployment and delivery of secure voice and data services across any available bearer and is perfect for small teams requiring 24/7 availability, plug and play set-up and remote management.

SHADE™ Central is a UK Hub providing connectivity for SHADE™ Services to the World Wide Web, ISDN, X.21, PSTN or dedicated private networks and the Spectra Network Operations Centre, where experienced engineers provide technical support and configuration to the deployed equipment.

SlingShot®

Spectra Group is the manufacturere of SlingShot®, a small and lightweight unit that attaches to existing radios, enabling users to maintain real-time Beyond Line of Sight (BLOS) communications in all situations and locations. It is currently available with both UHF and VHF capacity, for military and civilian use, with manpack, vehicle-mounted and maritime options.

Slingshot® offers a straightforward and cost-effective way to achieve global, secure, communications for those using in-service radios with national, multi-national and inter-departmental cryptographic security.

Using Inmarsat's L-TAC I-4 communications network to provide L-Band to L-Band BLOS communications from its global constellation of geostationary satellites, Slingshot® removes the need to rely on limited TacSat bandwidths for secure communications. It's omni-directional antenna and flexible beam-range ensures reliable and resilient communications wherever and whenever needed.

SHADE™

SHADE™ is a Communication system that has been designed to enable rapid deployment and delivery of voice and data services across a Satellite, Leased Line, GPRS, WIFI or ADSL bearer to SHADE™ Central, a UK Hub providing connectivity to the World Wide Web, ISDN, X.21, PSTN or dedicated private networks. Deployed SHADE™ nodes (SHADE™ Lite & μSHADE™) use any available bearer to link into the network to create a global communications capability

A 24/7 Network Operations Centre (NOC) sits at the centre of the SHADE™ network, ensuring Quality of Service (QoS) levels are maintained. NOC staff are able to remote into all equipment at the deployed locations to provide configuration changes and fault finding. The Network guarantees high levels of Confidentiality, Integrity and Availability of services. To ensure 100% redundancy of the network, SHADE™ Central is duplicated at a separate geographical location and services automatically failover in the event of a loss of service.

SHADE™ can be provided as a fully managed service (including airtime, manpower and equipment) and is completely scalable and flexible to meet your specific requirements. All equipment is packaged in ruggedised, portable and air-checkable containers. The deployed Nodes benefit from all key system components being provided with 100% pre-configured on site spares.

Secure - Reliable - Rapidly Deployable
communications systems in hostile and remote areas

SHADE™ Lite

SHADE™ Lite has been designed to provide voice and data services for small to medium size teams operating in remote or hostile areas.

SHADE™ Lite utilises any available bearer, including 3G/4G , ADSL and / or VSAT. It can be deployed globally in a fixed, short term or mobile environment.

Although small in form, SHADE™ Lite benefits from all the security, resilience and technical support of the SHADE™ system. The NOC staff are able to provide remote technical support and configuration to the deployed equipment.

Teams using SHADE™ Lite can rapidly deploy to remote or hostile areas knowing that their voice and data communications requirements are fully catered for, enabling them to concentrate on their main tasks.

SHADE™ Lite is portable, pre-configured and is supported by highly skilled engineers in the 24/7 NOC

TRAINING & OPERATION

SHADE™ Lite can be installed and operated by a single user with minimal training. It is a plug and play operation that can be set-up in minutes.

The equipment is capable of being powered by 12V DC (Vehicle), 110V AC or 240V AC to allow maximum deployment flexibility.

Technical Specifications

Physical Characteristics		Power		Interfaces	
Weight	22.4 Kg	Vehicle	12V DC	Ethernet	Configurable IP Ports
Length	660 mm	Mains	110 ~ 240V AC	ISDN	2 or 8 x64 kbps
Width	600 mm	Back-up	Internal Battery Pack	X.21	2 ports
Depth	200 mm	Back-up	UPS APC 1500	Security	AES 256

Services:	Internet	Email	Voice over IP	Tracking Services
Bearers:	VSAT (C, Ka, Ku)	ADSL	Leased Line	3G/4G

μShade™ is effortless. It provides secure voice and data services for small teams operating in remote or hostile areas and operating away from their home base. By automatically creating a secure tunnel, μShade™ ensures communications security.

μShade™ is anywhere. It makes use of any available communications bearer but is predominantly designed to utilise BGAN, Wifi, 3G, 4G ADSL and Leased Line. It can be deployed globally, at short notice, by small teams or a single user travelling into any area, confident that they will be able to securely access the internet and private networks.

μShade™ is flexible. It can be configured to utilise Spectra's core infrastructure, or any available network, in order to communicate to any required end point from anywhere in the world.

μShade™ is compact. Yet it still benefits from all the security, resilience and technical support offered by SHADE™. The Network Operations Centre (NOC) staff are able to provide technical support and configuration to the deployed equipment.
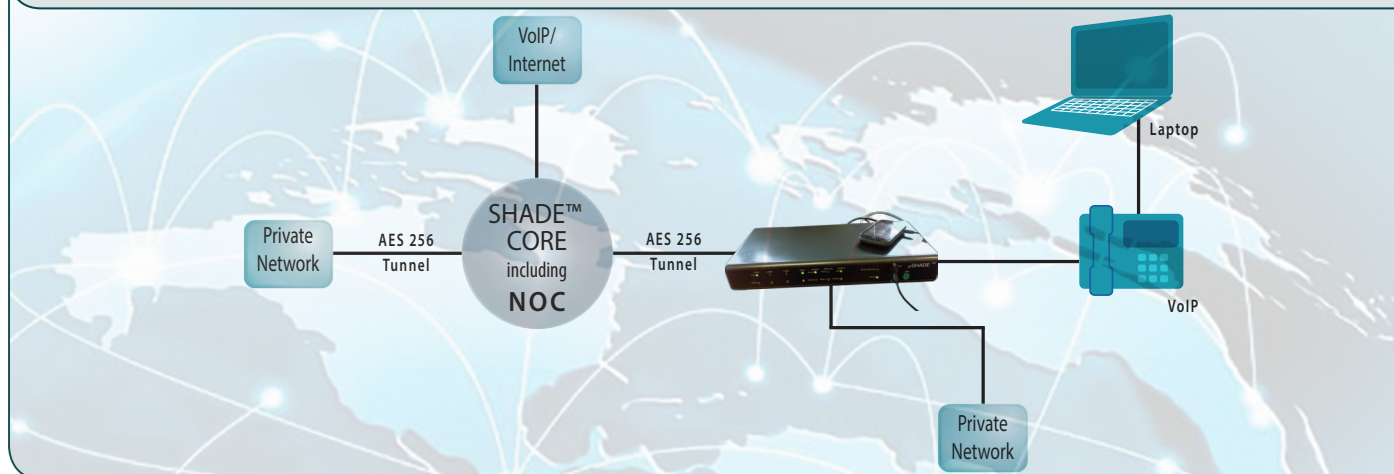
TRAINING AND OPERATION

μShade™ can be installed by a single user with minimal training. It's plug and play operation can be set-up in 2-3 minutes by an unskilled user. A secure tunnel is automatically created to the configured end-point as soon as a communication bearer is activated.

Physical Characteristics (Comms Box)		Power		Interfaces	
Weight	1.6 Kg	Vehicle	12-24V DC	Ethernet	x3 Ports (x 1 PoE)
Length	340 mm	Mains	110 ~ 240V AC	ISDN	(optional)
Width	160 mm	Back-up	Internal Battery Pack	X.21	(optional)
Depth	50 mm			Security	AES 256

Services:	Internet	Email	Voice over IP	Tracking Services
Bearers:	BGAN	ADSL	Leased Line	3G/4G

µShade™ is capable of being powered by 12 - 24v DC (vehicle or solar panel), 110v AC or 240v AC to allow for maximum deployment flexibility. It also has an internal battery that will provide power for approximately 1 hour of operation.

For more details on this product, please contact:

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