


inmarsat

L-TAC

INMARSAT GLOBAL GOVERNMENT
COMMUNICATIONS MADE CERTAIN



INMARSAT L-TAC

Inmarsat's award winning L-TAC service offers satellite based Beyond Line Of Sight (BLOS) communications on the move for UHF and VHF users.

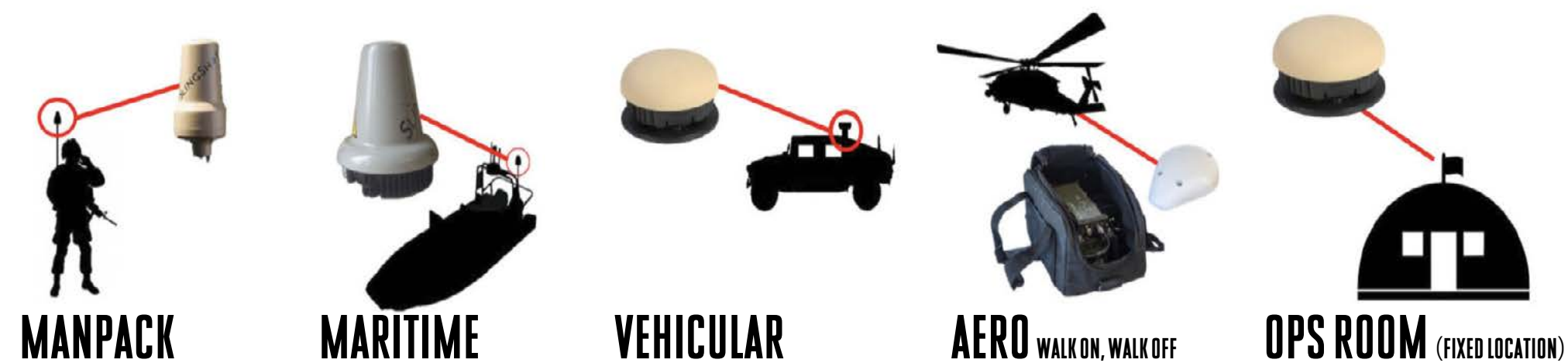
Designed with mobility in mind, Inmarsat's L-TAC service enables existing in-service tactical radios to transparently access BLOS communications without the need to modify the radio hardware.

BENEFITS

- Beyond Line Of Sight(BLOS) upgrade to existing tactical radio voice and data network services
- End user encryption maintained
- Affordable UHF TACSAT alternative
- Interoperability: VHF-C/ VHF-M/UHF
- COTM solutions for Man pack, Vehicular, Maritime & Aero Units
- Extremely easy to learn / limited training (approximately 2 hours)
- Remote support through our 24x7 Network Operations Centre

FEATURES

- Designed to support in-service radios and compliment existing military capacity
- Radio agnostic and transparent - interoperates between UHF & VHF military and commercial frequencies
- Omni-directional antennas. No need to stop and point.
- Utilises 14 Narrow Beams, with Customised Beams available
- Very small form factor, lightweight and low power consumption
- Data enabled (HPW and Viasat)
- Flexible leases (Minimum 2 weeks)



MILITARY CUSTOMER CHALLENGE

Military users need to exercise command and control of widely dispersed forces in austere environments without the delay of deploying terrestrial infrastructure or the operational burden of protecting and sustaining them. UHF TACSAT is rare and difficult to access at short notice. Users need an enhanced service immediately.

REQUIREMENT

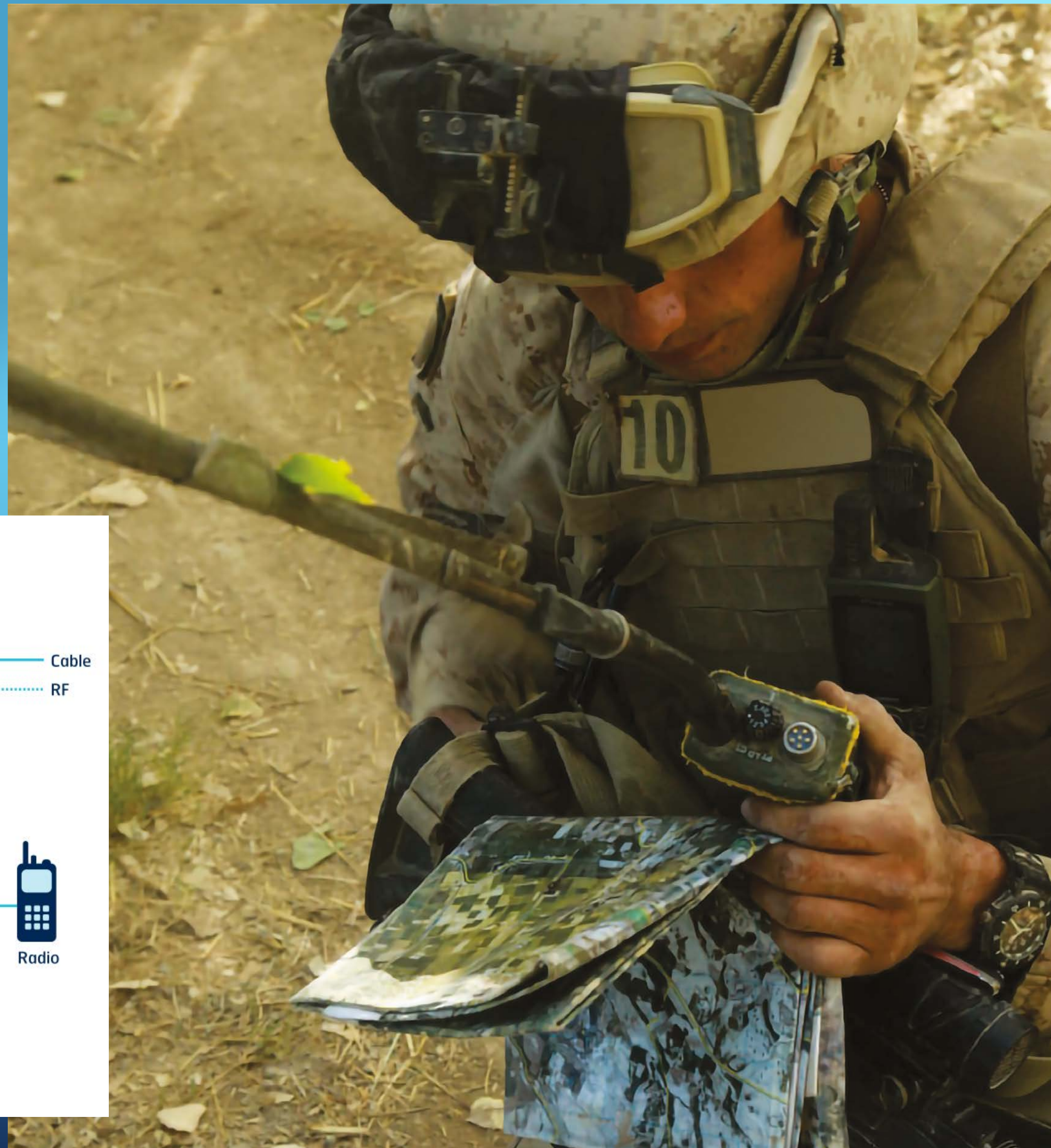
Increase the number of TACSAT channels available to users for voice and data communications. Allow netted voice and data for an all-informed network on-the-move, on-the-pause or at-the halt using existing radios, whilst maintaining national crypto.

SOLUTION

The service is implemented using a single hop through Inmarsat's satellite system via directly connected L-band uplinks and downlinks, giving users the same experience as UHF and VHF communications through our highly resilient L-band satellite channels. The service supports military and civilian operations for aviation, maritime, vehicle, man pack and fixed Ops room applications.



MILITARY CAPABILITY SCENARIO



SATCOM OVER YOUR RADIO

The Joint Force Commander has decided he needs to expand into the rebel held territory to the west.

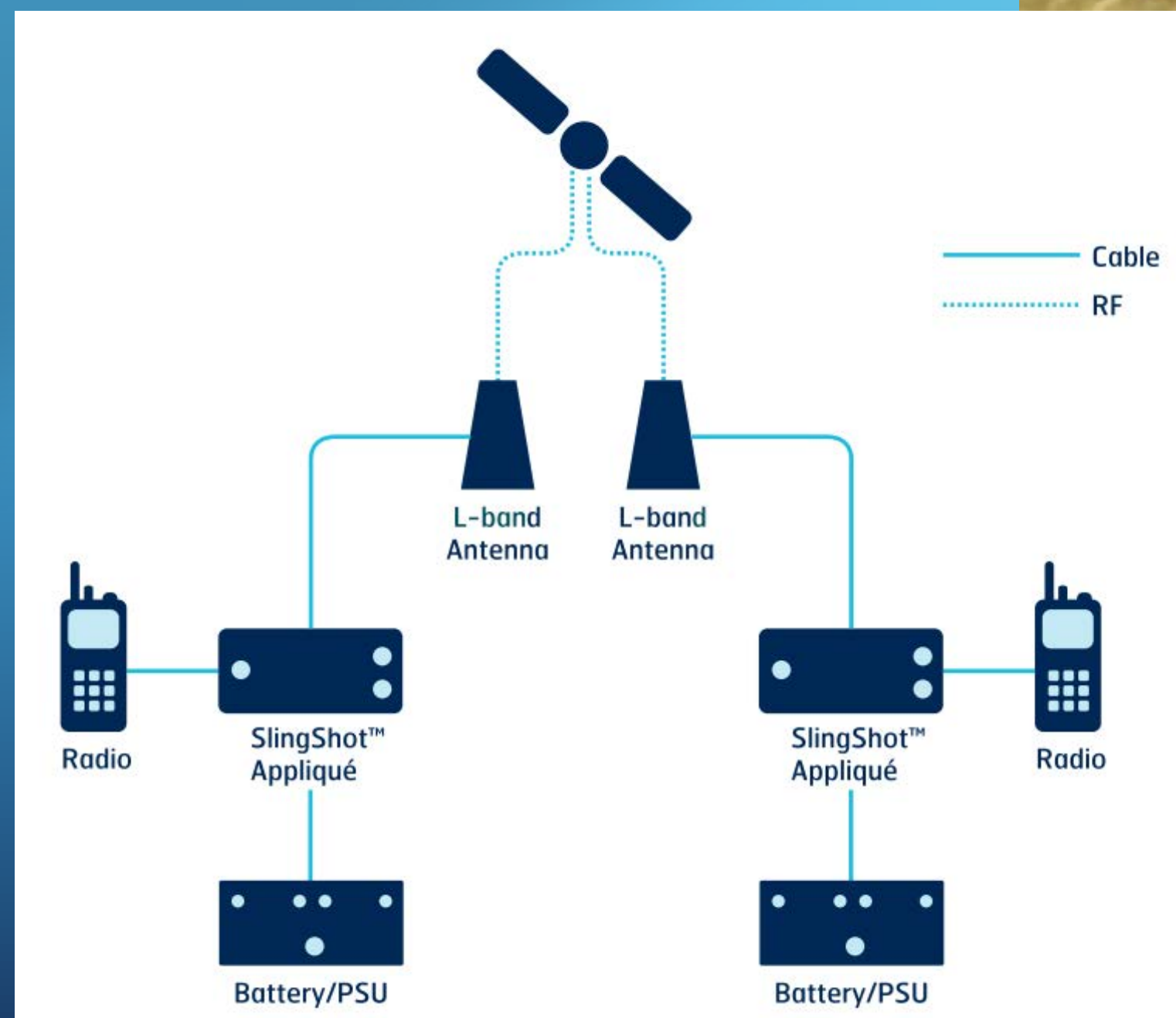
The lead reconnaissance foot patrol supplies a steady flow of intelligence as it moves forward, constantly in touch with battle group HQ, well to its rear, without pausing to set up antennas.

The mounted elements of the main assault force maintain communications with patrols and the HQ as they manoeuvre to the north, far beyond the range of UHF combat radio.

The battle group commander speaks securely and reliably on the move to a sector hundreds of kilometres away, and to flanking coalition partners, while logistic elements follow to the rear, ready to establish the new forward base.

Maintaining contact without the need for range-extension stations or the technical challenges of mobile HF radio or lack of UHF terrestrial infrastructure.

Thanks to Inmarsat's L-TAC service, mobile BLOS communications are available with minimum additional training over your existing radios.



PUBLIC SAFETY SCENARIO

For regular VHF users, L-TAC offers a fast-to-deploy and cost-effective capability for extending terrestrial coverage, either in remote terrains where there is no local VHF repeater or where natural or criminal action has destroyed the repeater. The provision of an L-TAC capability provides remote teams with a means of communication without the expense of a massive rollout of radio repeaters in an extended area.






In a public safety scenario, the existence of both UHF and VHF L-TAC variants will enable normally disparate teams such as military, police and civil agencies to work more closely together. Despite the fact that they may all be using different radio types and frequency bands, by taking out an L-TAC lease, they can interconnect with each other without the current need for a retransmission facility.









L-TAC SPECS

CONFIGURE A SYSTEM TO SUIT YOUR NEEDS.




ANTENNA

					
	L-BAND VEHICULAR ANTENNA	L-BAND MARITIME ANTENNA	L-BAND MANPACK ANTENNA	L-BAND AVIATION ANTENNA	L-BAND LOW PROFILE ANTENNA
SHORT TITLE	Ae-V	Ae-MT	Ae-M	Ae-A	Ae-LP
SPECTRA PART NUMBER	SG-SS-2001A	SG-SS-2002	SG-SS-2003	SG-SS-2004	SG-SS-2006
SIZE (MM)	146 x 72	150 x 142	76 x 153	111 x 143 x 38	205x 153 x 40
WEIGHT (G)	667	705	305	385	600
APPROVALS	FCC Part 15 Canada 310 DTM: Inmarsat 1401	FCC Part 15 Canada 310 DTM: Inmarsat 1401	FCC Part 15 N/A DTM: Inmarsat 1401	TSO-C 132 in progress DTM: DO-160D RTCA: DO-210D	CE DTM: Mil Std 810G DTM: Mil Std 461F
COLOUR	Khaki	Grey	Khaki	White	Black
CONNECTORS	RF-SMA	RF-SMA	RF-BNC	RF-TNC	RF-TNC
STANDARD MOUNTS	Mag-Mount Base	Pole-Mount Bracket	Screw-Mount	ARINC-743 footprint	
OPTIONAL MOUNTS	Antenna Mount Clamp Set	Antenna Mount Clamp Set	Antenna Mount Clamp Set Elevated Pole Set Extendable System	n/a	
FREQUENCY RANGE	1525 to 1660 MHz				

APPLIQUE





						
	UHF MILITARY BAND MANPACK	UHF MILITARY BAND VEHICULAR/MARITIME	VHF MILITARY BAND MANPACK	VHF MILITARY BAND VEHICULAR/MARITIME	VHF COMMERCIAL BAND MANPACK	VHF COMMERCIAL BAND VEHICULAR/MARITIME
SHORT TITLE	UHF-M-M	UHF-M-VMT	VHF-M-M	VHF-M-VMT	VHF-C-M	VHF-C-VMT
SPECTRA PART NUMBER	SG-SS-1002	SG-SS-1001	SG-SS-1004	SG-SS-1003	SG-SS-1006	SG-SS-1005
INPUT FREQUENCY BAND	240 - 311 MHz	240 - 311 MHz	58 - 88 MHz	58 - 88 MHz	144 - 174 MHz	144 - 174 MHz
SIZE (MM)	170 x 75 x 30	170 x 87 x 30	204 x 75 x 30	204 x 87 x 30	170 x 75 x 30	170 x 87 x 30
WEIGHT (G)	507	489	605	550	507	489
COLOUR	Matt Black	Matt Black	NATO Green	NATO Green	Matt Grey	Matt Grey
RF POWER INPUT REQUIRED	2 - 4 Watts	2 - 4 Watts	3 - 10 Watts	3 - 10 Watts	3 - 10 Watts	3 - 10 Watts
INGRESS PROTECTION	IP67					
APPROVALS	CE MIL-STD - 810G MIL-STD - 461F					
ENVIRONMENTAL	-26° to +58°C Operating					
CONNECTORS	DC Power: LEMO RF Input: TNC RF Output: SMA					

BATTERY

			
	BATTERY CAP 2590 & 5590	BATTERY CAP MBITR & 152	OPS ROOM MAIN CVTR.
SHORT TITLE	BC-2590/5590	BC-MBITR/152	PSM-AC
SPECTRA PART NUMBER	SG-SS-3009-0.5 SG-SS-3009-1	SG-SS-3010-0.5 SG-SS-3010-1	SG-SS-3004
INPUT POWER	Standard 5590/2590 Battery interface	Standard MBITR/152 Battery Interface	100 - 240V AC
SIZE (MM)	119 x 70 x 33	67 x 39 x 53	139 x 53 x 32
WEIGHT (G)	325	183	247
COLOUR	Black		
INGRESS PROTECTION	IP55 (When connected)	IP67 (When connected)	IP41 (Indoor only)
APPROVALS	CE Mil-Std - 810G MIL-Std - 461F		
ENVIRONMENTAL	-26° to +58°C Operating		
CONNECTORS	DC Power: LEMO		AC in: C13 IEC DC Output: Bulgin MicroBuccaneer



walk-on system is available for maritime, vehicular and aero variants with all antenna types

				
	UPSU UNIVERSAL POWER SUPPLY	AA BATTERY CASSETTE	BATTERY ADAPTER 2590 / 5590 FOR UPSU	BATTERY ADAPTER MBITR / 152 FOR UPSU
SHORT TITLE	PSU-U	BC-AA	BA-2590/5590	BA-MBITR/152
SPECTRA PART NUMBER	SG-SS-3002	SG-SS-3013	SG-SS-3011-0.6	SG-SS-3012-0.6
INPUT POWER	12 - 28 VDC	x8 AA Batteries	Standard 5590/2590 Battery interface	Standard MBITR/152 Battery Interface
SIZE (MM)	107 x 68 x 38	189 x 43 x 40	118 x 80 x 40	67 x 38 x 13
WEIGHT (G)	290	295	215	100
COLOUR	Black			
INGRESS PROTECTION	IP67	IP67	per Battery	per Battery
APPROVALS	CE	CE	n/a	n/a
ENVIRONMENTAL	-26° to +58°C Operating	-26° to +58°C Operating	n/a	n/a
CONNECTORS	DC Input: Bulgin MicroBuccaneer DC Output: LEMO	DC Output: LEMO	UPSU Connector: LEMO	UPSU Connector: LEMO



HOW TO BUY

Inmarsat products and services are available through select Inmarsat distribution partners and service providers.

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inmarsat.com/buy



SUMMARY

L-TAC provides an enabling capability for military and civilian UHF/VHF Push-to-Talk users. Using Inmarsat-4 satellites, BLOS connectivity is provided to users across a global footprint. L-TAC enables users to connect tactical voice and data circuits between existing tactical radios in a highly-reliable fashion. Service is implemented using a single hop through an Inmarsat-4 satellite providing users with the same experience as if operating on UHF SATCOM or terrestrial networks. Using standard tactical radios and field-proven Slingshot systems, rapid deployment and activation of user networks are enabled. The L-TAC service is currently in active operations with armed forces and public safety agencies around the world, ensuring forces in harms way remain connected and operationally effective, whether on the ground, in the air or at sea.

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