Bracer™

Bracer™ sets the standard in secure commercial satellite communication

Keep your communication lines open and information secure. QineticQ's Bracer™ satellite radio communications device and service provides end-to-end encrypted (**AES 256 FIPS 140-2 level 3**), beyond line of sight (**BLOS**) voice in one-to-many push-to-talk radio mode, Position Location Information, and SOS emergency alerting.

Designed for discretion and engineered to operate in the planet's harshest environments - it is the most robust, effective and reliable commercial TacSat in the market.

Powered by Iridium satellite technology, the 100% BLOS, push-to-talk device keeps you connected through a highly-resilient network, while end-to-end encryption protects your information and allows you to operate without constraints.

When information security is critical, trust Bracer™.

- **Extreme resilience**: Delivers guaranteed performance in some of the harshest environments in the world and is rated IP66 and IP67

- **Compact carrying:** Optimized for size, weight and power to be deployed easily and used discreetly

- **Affordability without compromise:** Bracer's use of commercial satellite technology guarantees elite functionality at a fraction of the cost of military alternatives

- **High availability:** 100% BLOS capability keeps global teams connected, when constant communication is critical

- **Superior security:** End-to-end encryption powered by QinetiQ, ensuring team communications remain secure and information stays safe

- **Instant C2:** User configurable global coverage in seconds, so that when time is of the essence, securing communication lines is simple

- **Third party integration:** Universally inter-operable with a range of covert, discreet and overt audio ancillaries; letting you choose the best radio to meet mission-specific tasks
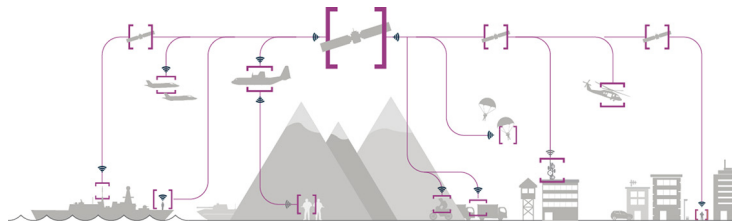
QINETIQ

Connected. Everywhere.

metocean telematics | iridium

BRACER™ TECHNICAL SPECIFICATIONS

PHYSICAL		
Dimensions	L 170 mm x W 76 mm x H 33 mm (excluding antenna)	L 6.9" x W 3" x H 1.3" (excluding antenna)
Weight	400 g	14.1 oz
Material	UL rated PC-ABS with TPE rubber over-mould	

ENVIRONMENTAL		
Temperature	Operating: -10 °C to 55 °C	Operating: 14 °F to 131 °F
	Battery Charging: 0 °C to 55 °C	Battery Charging: 32 °F to 131 °F
	Storage: -40 °C to 60 °C	Storage: -40 °F to 140 °F
Ingress protection	IP66 / IP67 to 1-m immersion (IEC/EN 60529)	
Vibration	Tested to MIL-STD-810G / Def Stan 00-035 for wheeled/tracked operation & helicopter transportation	
Shock	Tested to MIL-STD-810G / Def Stan 00-035 to 40 g / 11 ms	
Air transportation	MIL-STD-810G / Def Stan 00-035 for pressurized/unpressurized transportation	
Mechanical Vibration & Shock	Extra storage for large file transfers	

INTERFACES		
Power input	SIM card	PLI / C2 input/output
Audio input/output	Internal antennas	Internal antennas

GENERAL		
Services	Voice: One-to-many, BLOS, Iridium™ push-to-talk (insecure** and secure modes)	Secure Position Location Information (PLI) and emergency alerting (SOS)
	Simultaneous voice and PLI	Multiple PTT talkgroups
Frequency range	Iridium 1616–1626.5 MHz L-band	
Waveform	TDD, TDMA/FDMA	
Transmit Power	7 Watt (peak)	
Audio latency	500ms	

SECURITY	
Insecure mode	Iridium™ AES 256 SatCom bearer link encryption
Secure mode	Additional layer of customer-keyed AES 256 end-to-end content encryption for push-to-talk and PLI
Certification	FIPS 140-2 level 3 (pending)
Handset key management	Selection of insecure (link encrypted) or secure (link and end-to-end encrypted) talkgroups
	User authentication
	Zeroize

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