



BLACKSTONE BODY-WORN DF/TDOA SYSTEM

LEVERAGE THE BENEFITS OF PM TECHNOLOGY.

The DRS Blackstone Body-Worn DF/TDOA System provides mission-critical intelligence to the warfighter by rapidly detecting and locating a wide range of threat signals, monitoring signals of interest, and supporting real-time analysis of the signal environment. The system's light weight, low power consumption, field programmability, and multiple deployment configurations make it well suited for a wide range of operational scenarios. This DF sensor can easily be easily integrated into existing MOLLE/PALS webbing chest rigs and with a tactical radio for internode and squad communications.

The Blackstone System utilizes ruggedized Smartphone Technology for configuration, command and control of the system. It also displays parameters of intercepted signals and the positions of team members overlaid on a geo-referenced map. This provides situational awareness.



BLACKSTONE BODY-WORN DF/TDOA SYSTEM

FEATURES

- Collapsible small form-factor DF antenna
- Employs a low-SWAP dual-channel 6 MHz SI-8649A Picoceptor™ in a ruggedized chassis designed to meet MIL-STD-810G specifications
- Picoceptor™ software load supports high-speed scanning, monitoring, and geo-location of narrowband signals in the 2-3000 MHz band
- Supports single- or multi-node operations
 - Utilizes tactical radio for communications infrastructure
 - Smartphone, chest-mounted or worn on forearm, features Android-based GUI
 - Flexible targeting control
 - Mapping of DF/TDOA and team node positions
 - Collaborative DF
 - Audio/Visual Target Alerts
- Supports the following external interfaces:
 - Telescoping small factor DF antenna assembly
 - Tactical radio (not supplied)
 - Scorpion H2 Android controller
 - 5590/2590 Battery connector
 - External SAASM GPS (not supplied)
- Mission-based system log files
- Single octopus cable connects all system elements

SYSTEM CAPABILITIES

PARAMETER	SPECIFICATION
Frequency Range	
DF (full specification)	100-1000 MHz
DF (reduced specification)	20-100 MHz; 1000-2000 MHz
TDOA (optional)	2-3000 MHz
Frequency Resolution	1 Hz
DF Accuracy	8 degrees RMS maximum
Modulation Types	AM, Narrowband FM, Wideband FM, USB, LSB, CW
DF of Frequency Hoppers	Yes, < 50/sec
Instantaneous IF Bandwidth	6 MHz
Tuning Speed	< 500 microseconds
Number of Channels	Two
I/O	1 USB HS port (host or device)
Optional I/O	RS-232, 1 pps input, 2nd USB
Data Output frequency	Scan (up/down reports), DF (w/ standard deviation), and audio logs in XML format)
GPS input	Internal or Optional External
Internal Storage	Up to 48 GB
Time Stamp	Yes
Overall Weight	13.8 lbs.

Smartphone Controller Worn on Forearm or in Chest Pouch



DF Antenna Head w/Modulator and Digital I/O Board (Via: Mixed Signal Connector)

Telescoping Mechanism

Tactical Radio (via USB)



Android-based GUI Enhances Situational Awareness

Ruggedized Blackstone Picoceptor (w/Hot-Shoe Connector)

Same Battery as PRC-152 Radio (direct connection w/Blackstone Pico)



Cleared for Public Release DRS Signal Solutions, Inc. case number 13-DS-036 dated March 11, 2013. Export of DRS SIGNAL SOLUTIONS products is subject to U.S.export controls. Licenses may be required. This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind. Information is subject to change at any time. Copyright © DRS SIGNAL SOLUTIONS 2017. All Rights Reserved.

PN14103879-001 | REV C | October 2018