

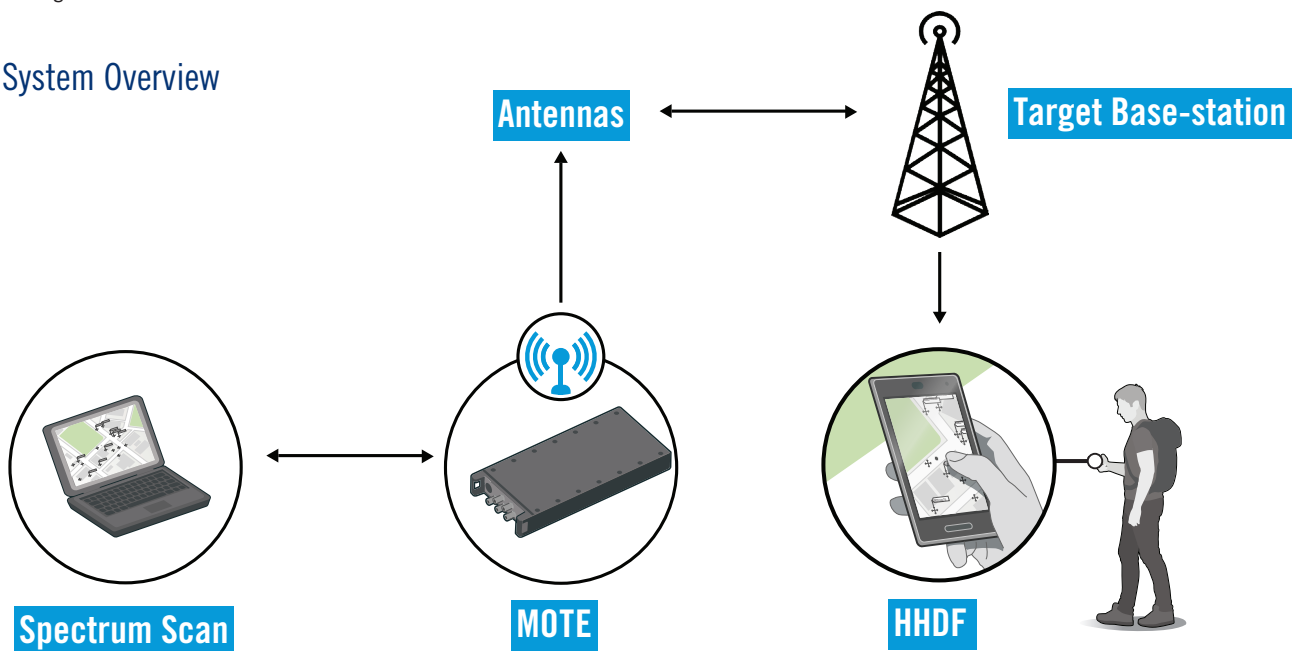
Data Sheet

MOTE - Cellular Base-station Detector

MOTE Cellular Base-station Detector

DTC propose a Cellular Base-station detection and location system based on the in-service MOTE miniature cell emulator and HHDF direction finder. The system can be tactically deployed to support the identification of fake base-stations by detecting changes in the cellular environment and assessing the characteristics of the suspect cells. Upon identification, fake cells can be located using the HHDF handheld GSM and UMTS direction finding unit.

System Overview



MOTE

The MOTE product from DTC is an ultra-portable active interception solution with integrated spectrum scanner. Its small size and light weight enable covert operations to be carried out. The unit has multiple control and reporting mechanisms to suit different scenarios. A short-range, real-time control interface is provided by a tablet connected to the unit via a wireless link.

For the Cellular Base-station Detector application, the integrated Spectrum Scanner is used to compare scans over time assess the cell characteristics of the suspect cells. The operator will then be notified via the graphical user interface of new cells and cells that cannot be used to connect to a network.



GSM

UMTS

LTE



ULTRA
PORTABLE



TRI-PROTOCOL



COVERT
DEPLOYMENT

HHDF

The HHDF is a lightweight, portable, state of the art device for tracking and geo-locating mobile devices and base-stations. The HHDF is protocol and frequency agile, allowing the user to track GSM and UMTS devices across a wide range of frequency bands. The HHDF is controlled by a smart phone connected to the unit over a Bluetooth link. This makes the unit easy to configure and use without attracting attention.

For the Cellular Base-station Detector application, the HHDF will be used to direction find and locate GSM and UMTS base-station transmitters.



GSM

UMTS



DIRECTION
FINDING



MULTI-
FREQUENCY



COVERT
DEPLOYMENT

Specifications - MOTE

- Acquire the identity parameters (IMSI & IMEI) of cellular devices off-air.
- Hold or direct targets between protocols in a controlled manner for geo-location.
- Correctly interact with non-target cell phones to preserve network service in the operational zone.

MOTE	Channels	One (1)
	Channel Range	GSM bands: GSM-850, E-GSM, DCS, PCS UMTS Bands: I, II, III, IV, V, VIII LTE bands: 1-4, 5, 7, 8, 20
	Protocol Support	GSM, UMTS, LTE
	RF Output Power	MOTE unit 50mW MOTE + PAPSU (optional PA) 1W LTE band 7 4W all other UMTS & LTE bands 8W GSM
	Power Supply	12-17VDC (14.8VDC nominal) external battery
	Power Consumption	20W (unit only) 100W (unit + PAPSU)
	Size (mm)	193(L) x 90(W) x 28(H)
	Weight	Circa 800 grams
	Operating Temperature	0°C to 40°C
	Environmental Rating	IP67

Specifications - HHDF

HHDF	Frequency Range (MHz):	GSM: 850 band, 900 band (inc. E-GSM), 1800 band & 1900 band UMTS: Bands: I, II, III, IV, V & VIII
	Power Supply	3 x AA batteries
	Power Consumption	Typical battery life 3.5hrs
	Size (mm)	HHDF: 120(L) x 65(W) x 28(H) High Band Antenna: 78(L) x 78(W) x 18(H) Low Band Antenna: 120(L) x 120(W) x 17(H)
	Weight	HHDF: 140 grams High Band Antenna: 230/460 grams (element/array) Low Band Antenna: 550/1100 grams (element/array)
	Operating Temperature	0°C to 55°C
	Antenna	2 x body worn antennas
	Interfaces	On/Off, Status LED, Smart phone interface

For further information on MOTE - Cellular Base-Station Detector or any other of our range of surveillance solutions, contact your Sales Account Manager or one of our Regional Sales Offices, or email solent.info@domotactical.com

DTC – Solent
Fusion 2, 1100 Parkway
Solent Business Park
Whiteley, Hampshire
PO15 7AB, UK

T: +44 (0) 1489 566 750

DTC – Tampa (Head Office)
3845 Gateway Centre Boulevard
Suite 360
Pinellas Park, FL
33782, USA

T: +1 727 471 6900

DTC – Randers
Haraldsvej 64B
DK-8960
Randers SØ
Denmark

T: +45 8791 8100

DTC – Singapore
21 Media Circle
Infinite Studios #06-04
Singapore
138562

T: +65 6643 4700

DTC – Brazil
Alameda Araguaia 2
190 – Ed. CEA II – suite 1109
Alphaville - Barueri
São Paulo, Brazil
06455-000

T: +55 11 2321 5055

The information contained in this document is the property of Domo Tactical Communications (DTC) Ltd. This document and the information contained herein is provided for evaluation purposes only and is subject to change without notice. Domo Tactical Communications (DTC) Ltd assumes no responsibility for errors that might appear in this document and gives no representations or warranties as to the accuracy of the information contained herein, including but not limited to the suitability and performances of the product or its intended application. © Copyright Domo Tactical Communications (DTC) Ltd 2016 All Rights Reserved