DIFFERENTIAL GLOBAL NAVIGATION SATELLITE SYSTEM

DGNSS

HIGH ACCURACY **GNSS** DIFFERENTIAL GEOLOCATION SYSTEM FOR ***CEIA DSMD*** METAL DETECTOR

NSN: 6665 150 195506

CEIA® USA

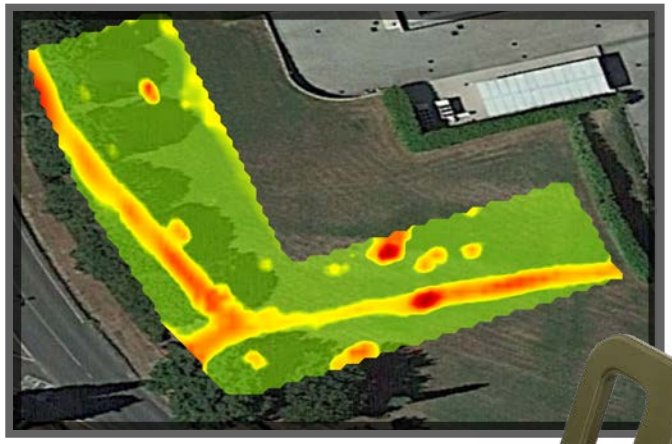
www.ceia-usa.com

DGNSS

HIGH ACCURACY GNSS DIFFERENTIAL GEOLOCATION SYSTEM

- The **CEIA *DGNSS*** is a differential global satellite navigation system designed for use in combination with the **CEIA *DSMD*** metal detector
- The system consists of a fixed ***DGNSS/BASE*** unit and a mobile ***DGNSS/ROVER1*** unit for each metal detector
- At the end of the search operations the ***DSMD*** unit enables the recordings of the differential positioning data, with centimetre precision, and the alarm levels of the metal detector to be extracted on a USB stick or on a PC

DISPLAY OF ORIGINAL *DSMD* DATA



DISPLAY OF DATA PROCESSED WITH POST-PROCESSING

DGNSS/BASE

The *DGNSS/BASE*, installed in a fixed position in the same search area, receives the signals sent by the visible satellites, calculates the coordinates of the relative position and transmits them, by RF connection in broadcast mode, to the *DGNSS/ROVER1* unit

DGNSS - GENERAL FEATURES

GNSS Receiver	Receiver type	Multiband GPS, GLONASS, Galileo and BeiDou	
	RTK format	Multiband RTK (RTCM 3.3)	
	LBAND Receiver	SBAS (WAAS, EGNOS, MSAS and GAGAN)	
	Accuracy	*Single*	1,5 m (5 ft)
		DGNSS	40 cm (15 ¾)
		RTK	< 1 cm (< ⅜ in)
RF communications	Frequency	869.4 ÷ 869.65 MHz	
	Channels	10 (from A to J)	
	Channel spacing	50 kHz	
	Modulation	4GFSK	
	Range	Up to 4 km, line of sight (RF Power = 5)	

DGNSS/BASE

Environmental characteristics	Weight	9,25 kg (20,4 lbs)	
	Dimensions	360 x 360 x 1295 mm (14 3/16 x 14 3/16 x 51 in)	
	Protection degree (IEC 60529)	IP65	
	Temperature	Storage	-45°C ÷ +85°C (-49°F ÷ 185°F)
		Operating	-25°C to +65°C (-13°F to 149°F)
	Complies with the international standards on radio interference and human exposure to electromagnetic fields		
Battery Operation	Operating time	48 hours of continuous operation	
	Charging time	4.5h	

N S N : 5 8 9 5 1 5 0 2 7 5 2 4 4

DGNSS/BASE

PARTS LIST

1. GPS ANTENNA
2. RF ANTENNA
3. HANDLE

4. CONTROL PANEL
5. BATTERY CHARGER CONNECTOR
6. ADJUSTMENT KNOBS

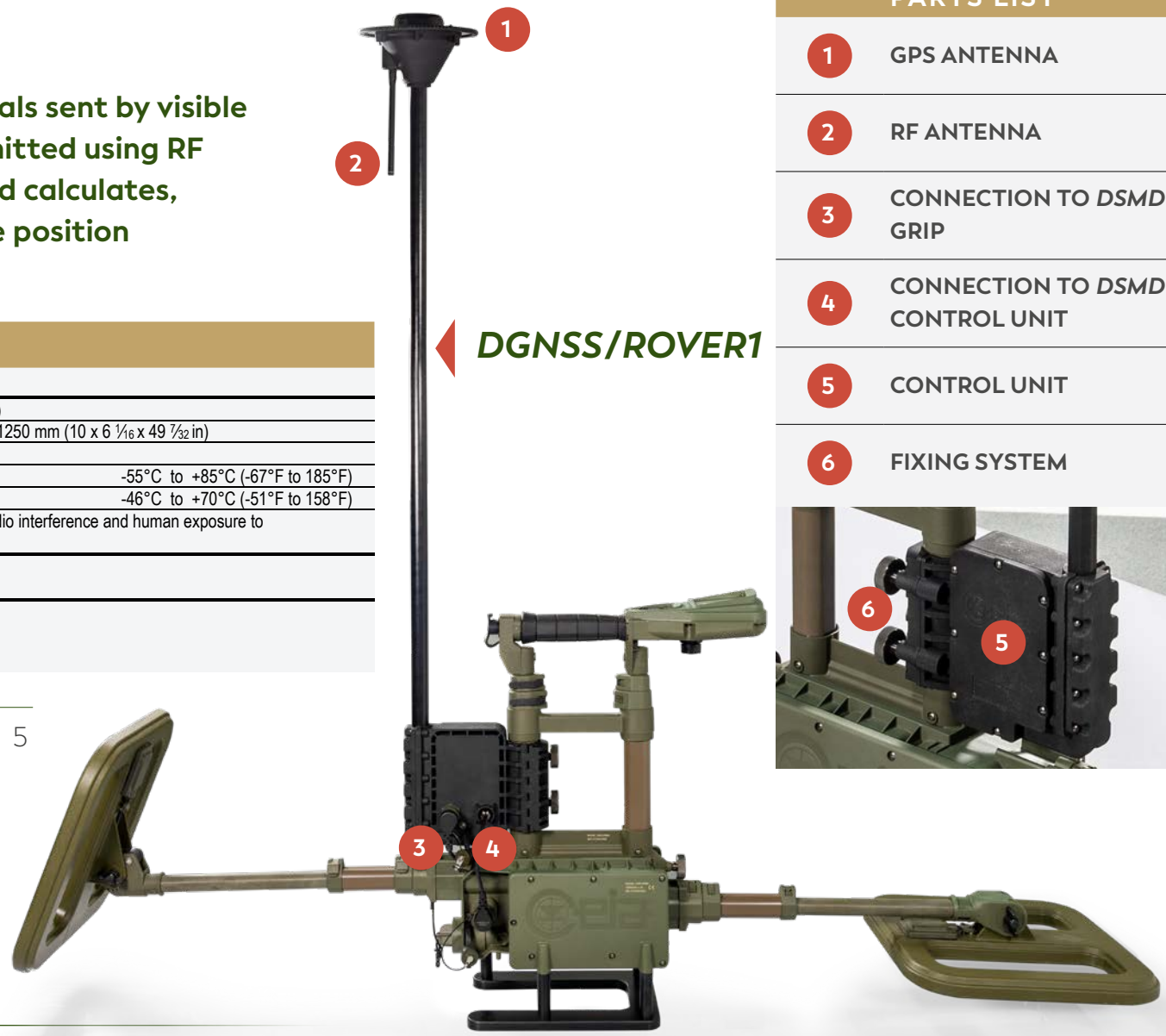
DGNSS/ROVER1

The *DGNSS/ROVER1* receives the signals sent by visible satellites and the coordinates transmitted using RF connection from the *DGNSS/BASE* and calculates, with respect to the latter, its relative position with centimetre accuracy

DGNSS/ROVER1

Environmental characteristics	Weight	1,4 kg (3 lbs)	
	Dimensions	253 x 154 x 1250 mm (10 x 6 1/16 x 49 7/32 in)	
	Protection degree (IEC 60529)	IP54	
	Temperature	Storage	-55°C to +85°C (-67°F to 185°F)
		Operating	-46°C to +70°C (-51°F to 158°F)
	Complies with the international standards on radio interference and human exposure to electromagnetic fields		
Battery Operation	DSMD Operating time with ROVER1 installed	>10 hours	

N S N : 5 8 9 5 1 5 0 2 7 5 2 4 5



PARTS LIST

1. GPS ANTENNA
2. RF ANTENNA
3. CONNECTION TO *DSMD* GRIP
4. CONNECTION TO *DSMD* CONTROL UNIT
5. CONTROL UNIT
6. FIXING SYSTEM

CEIA USA Ltd - 6336 Hudson Crossing Parkway, Hudson OH 44236
P 330-405 3190 • **F** 330-405 3196 • **E** security@ceia-usa.com • **Call** (833) 224-2342 (CEIA)