

Radar Systems Zond-12e Drone 500a GPR system datasheet

The system can be used both for airborne and ground surveys.

ANTENNA / GPR	2 channel Ground Penetrating Radar system with shielded antennas
Operating bandwidth	100-900 MHz (equivalent of the 2 separate antennas with 250/500 MHz center frequencies)
Sample rate	40,000 samples/second
Scan rate	1-40 scans/s per channel @ 512 samples/scan
Sample output	16 bit digital raw data
Time range	0-2000 ns selectable. Typical 0-500 ns. Depth range 0 - 10 m depending on ground properties
Depth	Up to 10 m depending on ground properties
Data format	Standard Geophysical SEGY Data Format (.sgy) with traces geotagging
Data channels	1 or 2 with individual settings for depth, filter and gain
Vertical filters	Off, Digital
Horizontal filters	Stacking, Background removal
Gain points	1-10 Linear gain
Gain levels	0 to +84 dB
Data storage	Raw data storage with memory for Gain used
Data file size	Limited only by available SD (airborne surveys) or HDD space (ground surveys)
ENVIRONMENTAL	
Temperature	-20°C to 60°C internal temperature
Humidity	96% non-condensing
Ingress protection	IP68 in protective box (used for transportation and for ground surveys) IP52 in airborne variant
MECHANICAL	
Size (L x W x H)	41 x 31 x 18 cm (airborne variant)
Weight	3 kg (airborne variant)
BATTERY	
Airborne variant	DJI M600/M600 Pro drone main battery is used to provide power to the GPR using standard power socket of the drone intended for payload
Ground surveys	Battery is integrated in protective box 99 W/h Li-Ion
Operating time	up to 12 hours
WHAT'S IN THE KIT	
	Zond-12e with 500 MHz center frequency antenna
	Prism 2 Data Acquisition/Processing software
	NANUK transport case (also used for ground surveys)
	99 W/h Li-Ion battery integrated into the case (used for ground surveys only)
	Wi-Fi router integrated into the case (used for ground surveys only)
	Mascot charger
	Tow handle for ground surveys
	Set of holders to fix GPR system on the DJI M600/M600 Pro drone
	Fabric protective cover for GPR system



Zond-12e Drone 500A configured for airborne use.



Zond-12e Drone 500A GPR system carried by the DJI M600 Pro drone in flight.