

Radar Systems

Zond Aero 1000 **NG**

GPR system

Datasheet

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

ANTENNA / GPR	Single channel Ground Penetrating Radar system with shielded antenna
Center frequency	1000 MHz
Operating bandwidth	600-1300 MHz (-6 dB)
Sampling	Real Time Sampling (RTS) with high hardware stacking
Samples per scan	256 / 512 / 1024 / 2048 / 4096 / 8192
Samples rate	up to 1,280,000 (depends on hardware stacking)
Scan rate	up to 2,500 scans/s (depends on hardware stacking)
Sample output	32-bit digital raw data
Time range per sample	18 ps / 36 ps / 71 ps / 89 ps / 125 ps / 143 ps / 179 ps / 250 ps / 357 ps / 500 ps / 625 ps / 714 ps / 1 ns / 1.25 ns / 2.5 ns
Depth	Up to 2 m depending on ground properties
Data format	Standard Geophysical SEG-Y Data Format (.sgy) with traces geotagging
Vertical filters	Off, Digital
Horizontal filters	Stacking, Background removal
Gain points	1-10 Linear gain
Gain levels	0 to +168 dB
Data storage	Raw data storage with memory for Gain used
Data file size	Limited only by available storage space

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)	31 x 19 x 15 cm - airborne configuration 52 x 43 x 21 cm - protective transportation box (for terrestrial surveys) 71 x 45 x 28 cm – carton box for delivery
Weight	1.8 kg - airborne configuration without mounting kit for the drone 7.0 kg – in protective transportation box 10.0 kg – weight in carton box for delivery

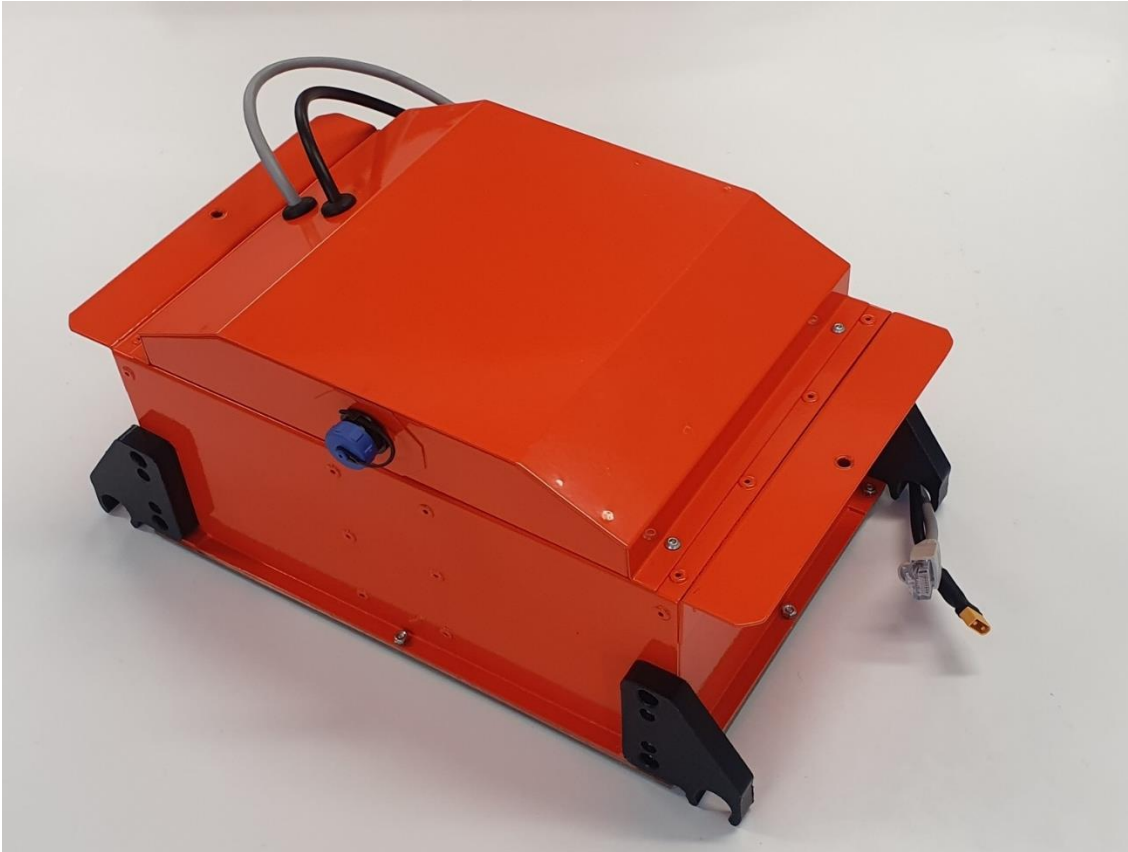
BATTERY

Airborne variant	Drone main battery is used to provide power to the GPR
Ground surveys	Battery is integrated in protective box, operating time up to 12 hours 99 W/h Li-Ion

WHAT'S IN THE KIT

	Zond Aero 1000 NG GPR system with 1000 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 rope for terrestrial surveys
	Mounting kit to fix GPR system on the DJI M350/M300 RTK drone

Zond Aero 1000 NG without protective box:



Zond Aero 1000 NG GPR system under DJI M300 RTK drone:

