

**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) <b>with traces geotagging</b>   |
| 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)<br>IP52 in airborne variant |

### MECHANICAL

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

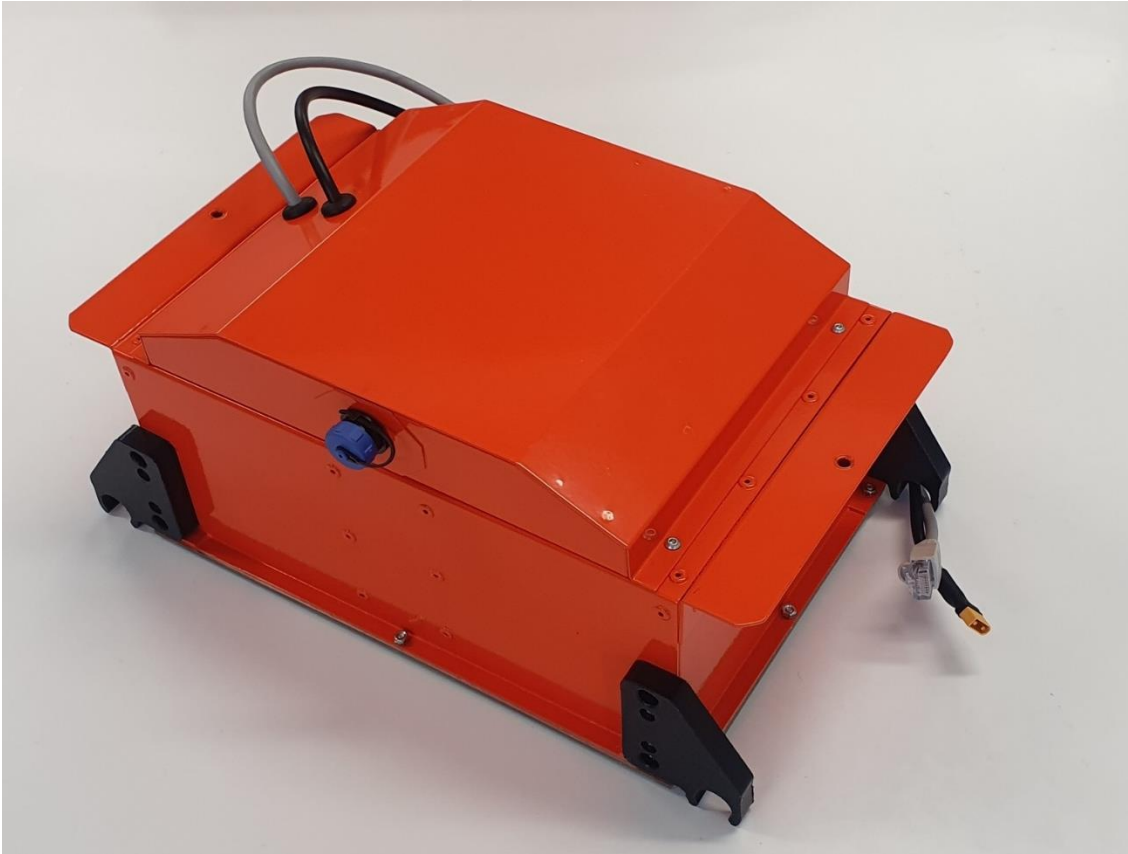
### BATTERY

|                  |   |
|------------------|---|
| 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<br>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:**

