

## Crossover1760 (CO1760) Data Sheet

As with all of the crossover GPR systems the CO1760 can be used in a variety of conditions and can be configured as a single channel (low or high frequency) or dual channel depending on your application. Its middle range antenna frequencies allow the operator to apply/ use the ground penetrating radar system in a variety of environmental, archaeological, UXO and civil projects. Used to image the near surface at high resolutions, at a medium depth range. Similar to the C0480 the CO1760 is available in a cart and sled configuration, enabling the user to access restricted, uneven terrain and other surface types, whilst maintaining an easy to use comfortable design which you can adjust / transport within the field.

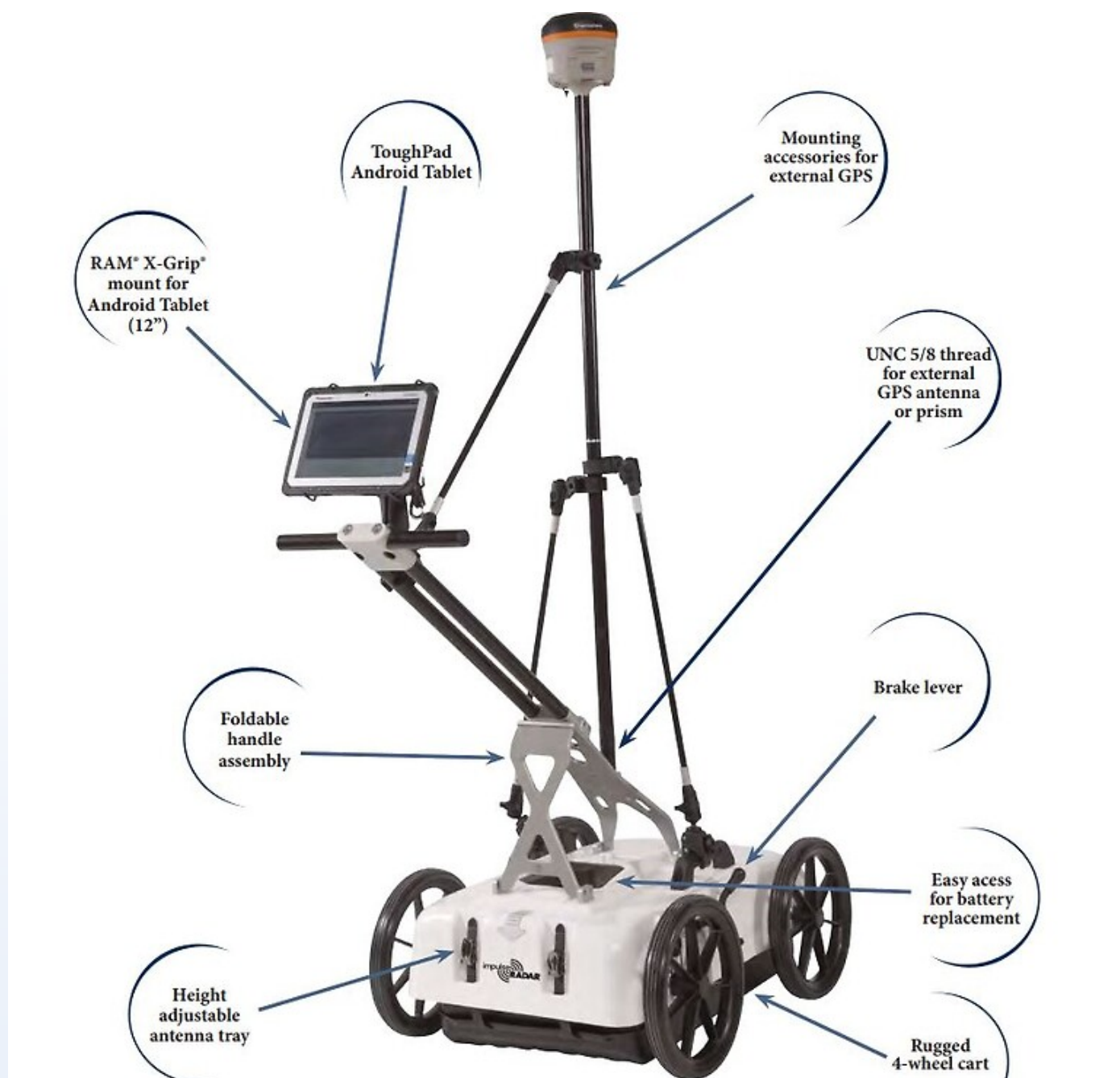


Fig.1 Depicts all of the components of the CO1760 in the cart/push configuration. (Image courteously provided by Impulse Radar)

## Features

- . RTS- Based Technology
- . Dual-Channel (LF and HF)
- . Android driven logger/interface
- . Wireless data collection & Internal data security
- . Integrated GPS
- . 7 Hour Battery life with no survey speed limits

## Typical Applications

- . Archaeology . Environmental Assessment . Forensics . Geological investigation (e.g. lithostratigraphic mapping) . Military or Forensic use . UXO and deep utility detection

## Product Dimensions

| Physical          | Dimensions (L x W x H)   | Weight               |
|-------------------|--------------------------|----------------------|
| (instrument only) | 695 mm x 445 mm x 205 mm | 9.5 kg (inc battery) |

## Technical Specifications

|                                      |   |
|--------------------------------------|---|
| <b>N.o Channels:</b>                 | 2   |
| <b>Center Frequency:</b>             | 170Mhz (Channel 1, Low Frequency) & 600Mhz (Channel 2, High Frequency)                    |
| <b>Bandwidth:</b>                    | > 120%, fractional -10 dB   |
| <b>Signal to noise ratio (SNR):</b>  | >100dB  |
| <b>N.o. Scans per second:</b>        | >800  |
| <b>Survey Speed:</b>                 | >130km/h @5cm point interval  |
| <b>Time window:</b>                  | 1050 ns (LF) / 263 ns (HF)  |
| <b>Acquisition/Positioning:</b>      | Wheel, time or manual; Wheel Encoder, Internal DGPS and External GPS (NMEA 0183 protocol) |
| <b>Power Supply and Consumption:</b> | 12V Li-ion rechargeable battery (an external 12v DC source can also be provided); 1.3A    |
| <b>Operation:</b>                    | 7 Hours   |
| <b>Weight and dimensions (inc</b>    | 9.5kg; 695 x 445 x 205 mm   |

**battery)- Antenna:**

**Operating Temperature:** -20°C to +50°C

**Environmental and Regulatory Certification:** IP65, CE,FCC

**Cart dimensions (when in transport):** 920 x 640 x 390 mm, 25.7kg (cart, antenna and display)

**Display:** 720 x 1280 pixel or better

**Operating system and memory:** Android (>ver. 5 Lollipop) or later; 2.7GB SDRAM or better

## Videos

ImpulseRadar Fitting the CrossOver Measuring Wheel & Battery to the CrossOver GPR antenna.

[https://www.youtube.com/watch?v=ZmQbAB\\_mKBQ](https://www.youtube.com/watch?v=ZmQbAB_mKBQ)

ImpulseRadar Folding the CrossOver Cart ground penetrating radar

<https://www.youtube.com/watch?v=A1qDDMi8ewM>