

**Cutting-edge dual-channel  
GPR solutions for efficient  
subsurface imaging**

**Instantly improve productivity  
with the fastest GPR antenna  
on the market**





# CrossOver

## Series Overview and Features

### First dual-channel RTS antenna

CrossOver is the first commercial series of dual-channel GPR antennas to be based solely on cutting-edge Real-Time Sampling (RTS) technology. The dual-channel configuration provides you with both low and high frequency bands in one package, making it possible to cover a broad range of applications with only one instrument.

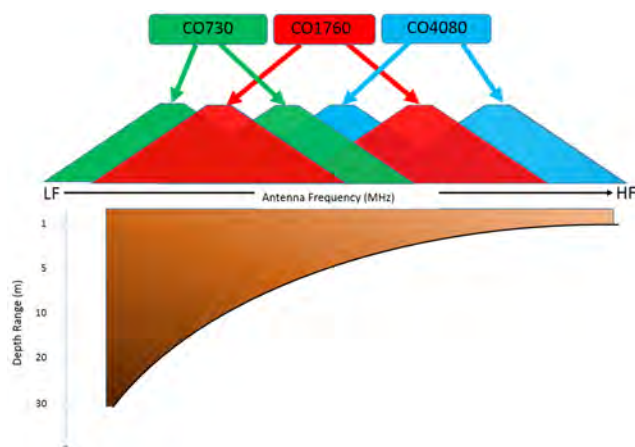
CrossOver antennas allow you to see the full available depth range, whilst maintaining resolution for maximum data clarity and quality, which in turn means better visualization for more accurate picking of points of interest.

*CrossOver – more than dual-frequency*

### Meeting your application needs

The CrossOver frequency options are optimized to cover a wide-range of applications from shallow to deep investigations, with the benefit of dual-channel (LF & HF) operation.

- CrossOver CO4080 (400 & 800 MHz) is suited for applications requiring shallow to medium depth penetration.
- CrossOver CO1760 (170 & 600 MHz), is suited for applications medium to deep depth applications.
- CrossOver CO730 (70 & 300 MHz) is suited for deep.



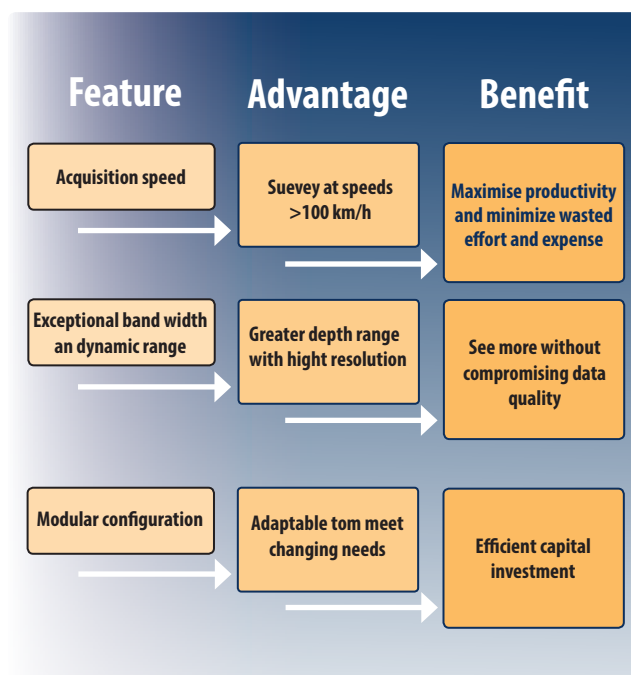
### CrossOver benefits

Real-Time-Sampling (RTS) based GPR antenna designs have much better performance (increased dynamic range, sensitivity and depth penetration) than conventional GPR antenna designs. ImpulseRadar's revolutionary dual-channel GPR antenna design takes it to the next level.

The unique range of dual-channel solutions reduces the need for investments in multiple single-channel antennas to achieve the same objectives. Whilst the high-speed performance increases productivity.

An Android-driven user interface offers flexibility in your choice of the acquisition and control device (tablet/smartphone) giving you more options to suit specific needs and budget.

Wireless, but secure data transfer between the antenna and user interface simplifies set-up and practical use.







## CrossOver – highlights

- First dual-channel RTS antenna
- Exceptional dynamic range, sensitivity and depth penetration
- Wide range of frequencies
- Modern field-rugged design
- Flexible data acquisition and control - Android devices
- Wireless data communication - no Cables
- Secure data logging via internal microSD card
- Integrated GPS (timing or positioning)
- External GPS support (NMEA 0183 protocol)
- 7-hour battery life (full specification enabled)
- No survey speed limitation, > 100 km/h
- Common batteries and accessories across range
- 2 Year warranty

## CrossOver–single channel

| Single Antenna Family | Dual Antenna Family |
|-----------------------|---------------------|
| CO 4080–S400          | CO 4080             |
| CO 4080–S800          |                     |
| CO 1760–170           | CO 1760             |
| CO 1760–600           |                     |
| CO 730–S70            | CO 730              |
| CO 730–S300           |                     |

This new Single-Channel option will allow you to have an entry-level instrument, with only one-channel, and at a lower cost, so you only pay for what you need today. However, we offer you the ability to upgrade the antenna (remotely) to activate the second channel at a later date, as/if your needs change.

CrossOver Single-channel are available in configurations.

- CrossOver CO4080-LF, (400 MHz)
- CrossOver CO4080-HF, (800 MHz)
- CrossOver CO1760-LF (170 MHz)
- CrossOver CO1760-HF (600 MHz)
- CrossOver CO730-LF (70 MHz)
- CrossOver CO730-HF (300 MHz)

## Wide range of accessories

### Push Cart

The CrossOver push cart provides an efficient means to move the antenna over a range of surfaces for the rapid collection of 2D GPR data. The handle assembly is fully foldable to reduce the physical footprint, making transportation and storage much more efficient. The push cart be equipped with external RTK GPS antennas or Total Station positioning.

### Pulling Accessories

The CrossOver pulling accessories and measuring wheel provide an alternative means to collect data in less accessible areas or where space is limited. Ergonomically designed to provide maximum comfort for the operator even during many hours of use.

### CrossPoint

ImpulseRadar CrossPoint is a software for the visualisation and interpretation of ImpulseRadar data files. CrossPoint can import and work with data files collected with ImpulseRadar CrossOver and Raptor systems, as well as some other third-party GPR file formats.





### ImpulseRadar CrossOver CO4080 Antenna

Frequency: LF: 400 MHz | HF: 800 MHz  
 Dimensions: 444 x 355 x 194 mm  
 Weight: 6.35 kg (including battery)  
 Depth range: down to 6m\*



### ImpulseRadar CrossOver CO1760 Antenna

Frequency: LF: 170 MHz | HF: 600 MHz  
 Dimensions: 695 x 445 x 205 mm  
 Weight: 9.5 kg (including battery)  
 Depth range: down to 10m\*



### ImpulseRadar CrossOver CO730 Antenna

Frequency: LF: 70 MHz | HF: 300 MHz  
 Dimensions: 960 x 760 x 270 mm  
 Weight: 20.2 kg (including battery)  
 Depth range: down to 15m\*

\*depth range is contingent upon the electrical properties of the ground or penetrable material under investigation and these figures are for guidance only. Depth range will decrease when there is an increase in electrical conductivity, as typically associated with clay rich soils and higher moisture content.

## About ImpulseRadar

We are a new, but fast-growing company, focusing on combining our experience with state-of-the-art technology to develop user-friendly GPR instruments.

As industry professionals, we have been influential in bringing to market innovative GPR solutions that have driven paradigm shifts in the application of this effective non-destructive technology.

ImpulseRadar's cutting-edge GPR solutions are built solely on the latest Real-Time Sampling (RTS) technology platform. They are incomparably fast, offer exceptional bandwidth and dynamic range, and are flexible to meet your specific needs. Visit us today to learn how we can save you time and increase your productivity.