



## GROUNDVUE GPR: TECHNICAL SPECIFICATION SHEET

### GROUNDVUE 3\_8

#### Controller:

Laptop interface: Ethernet or WiFi for control and data. Windows 7/8 operational software.

Number of transmitter trigger outputs: 1 to 8 (1 only for single channel version)

Number of receiver inputs: 1 to 8 (1 only for single channel version)

Time sweep (independently selectable per transmitter) : 10 to 160 ns. A 20 to 320ns version is available, on request.

Samples per sweep: 256

Data width: 16 bits

Scan rate : up to 1600 scans/sec

up to 200 scans per second with all 8 channels in operation

Transmitter pulse repetition rate: up to 2.5MHz, jittered for interference reduction

Distance between samples: selectable free running or encoder wheel triggered.

GPS or RTKGPS input on 9 pin Com port.

Internal LiIon battery for ca 4 hour operation. Mains charger

External power supply input: 12 to 13 Volts, 200 to 1000mA (depending on Tx/Rx configuration.

Size: 280\*175\*70 mm

#### Single channel controller:

Size: 220\*165\*60 mm

#### Low frequency transmitter antennas:

##### **250 MHz:**

Internal impulse transmitter of 1ns width, output voltage: 20 Volts.

Size: 275\*360\*150 mm

##### **400MHz:**

Internal impulse transmitter of 600ps width, output voltage: 12 Volts.

Size: 250\*250\*120 mm

#### High frequency transmitter antennas:

**4GHz:** See Groundvue 5 technical specification sheet.

##### **1.5 GHz:**

Internal impulse transmitter of 200ps width, output voltage: 6 Volts.

Size: 120\*120\*80 mm

Emitted cone:  $12\text{cm}^2 \pm 25^\circ$

##### **1GHz:**

Internal impulse transmitter of 300ps width, output voltage: 8 Volts.

Size: 120\*120\*80 mm

#### Low frequency receive antennas:

##### **400MHz:**

Frequency response: 200MHz to 800MHz

Integral preamplifier and sampler

Size: 250\*250\*120 mm

##### **250MHz:**

Frequency response: 125MHz to 500MHz

Integral preamplifier and sampler

Size: 275\*360\*150 mm

#### High frequency receive antennas:

**4GHz:** See Groundvue 5 technical specification sheet.

##### **1.5GHz:**

Frequency response: 600MHz to 3GHz

Integral preamplifier and sampler

Size: 120\*120\*80 mm

##### **1GHz:**

Frequency response: 500MHz to 2GHz

Integral preamplifier and sampler

Size: 120\*120\*80 mm

#### Groundvue 3 Single Channel

This system is available also as a single channel radar with a choice of the full range of antenna frequencies. No RF Head is required for the single channel radar. A range of adaptable skirts is also available so that the same system can be used for trolley operation, for vehicle operation, for hand towing across rough ground, or for lightweight structural investigations.

#### Interpretative Software:

ReflexW (Sandmeier) compatible. The ReflexW package can be hired or purchased from Utsi Electronics Ltd.

RoadDoctor compatible

Goodman's GPR-Slice compatible.

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