

# ImpulseRadar Raptor-80

ANTENNA		
Technology	ImpulseRadar real-time sampling	
Antenna type	Raptor	
Centre frequency	800 MHz	
Signal to noise ratio (SNR)	>100 dB	
Significant/useful number of bits	>16 bit	
Scans/second	>800	
Survey speed	> 70 km/h @ 5 cm point interval	
Data acquisition rate	160 MHz	
Time window	125 ns (24-channels)	
Bandwidth	>120%, fractional, -10 dB	
Acquisition mode	Wheel, time or manual	
Positioning	Wheel encoder, internal GPS, external GPS, Total-station	
GPS support	Integrated support for GPS (int./ext.), NMEA 0183 protocol	
Data time-tagging	To 1ms of \GPS-time	
Power supply	12 V Li-Ion rechargeable battery, or ext. 12 V DC source	
Power consumption	0.5 A per channel	
Operating time	3 hours (12-channel with 2 x 8.7 Ah battery)	
Dimensions	150 x 110 x 90 mm (Antenna only)	
Weight	1 kg (Antenna only)	
Operating temperature	-20° to +50°C	
Environmental	IP65	
Regulatory certification	CE, FCC pending	
USER INTERFACE		
	<b>Laptop PC (min. requirements)</b>	
Display	10" backlit, sun-readable	
Operating system	Windows 7 or later	
Processor	>1 GHz, 64-bit (x64)	
Memory	>4 GB RAM (64-bit)	
Storage	>20 GB (64-bit)	
Graphics	DirectX 9 graphics device with > WDDM 1.0 driver	
Communications interface	Ethernet 1 GB	
Recommendation	<i>Panasonic Toughpad FZ-G1 / Toughbook CF-31 (or equivalent)<sup>1</sup></i>	
CARRIER SOLUTIONS		
	Cart (up to 12-channels)	Vehicle (up to 24-channels)
Dimensions (when in use)	90 x 70 x 25 cm	190 x 80 x 60 cm
Scan width (swathe)	60 cm	148 cm
Wheels	2 x Ø315 mm / 1 x Ø120 mm	N/A
Weight of GPR-Array system	15 kg	30 kg
Total weight with carrier	37 kg	52 kg

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SOFTWARE	
<b>Talon acquisition software</b>	- Quick and easy configuration and start-up
	- Positioning configuration and device sync monitoring
	- Visualization of radargram for each channel
	- Data merge, storage and export
<b>Processing software</b>	ImpulseRadar recommends GPR-Slice Ground Penetrating Radar Imaging Software Visit: <a href="http://www.gpr-survey.com">www.gpr-survey.com</a>

<sup>1</sup> Configurations of more than 8-channels require a higher specification PC

ImpulseRadar products are under continuous development and we reserve the right to change specifications at any time and without prior notice. You may verify product specifications at any time by contacting our headquarters using the details listed below.