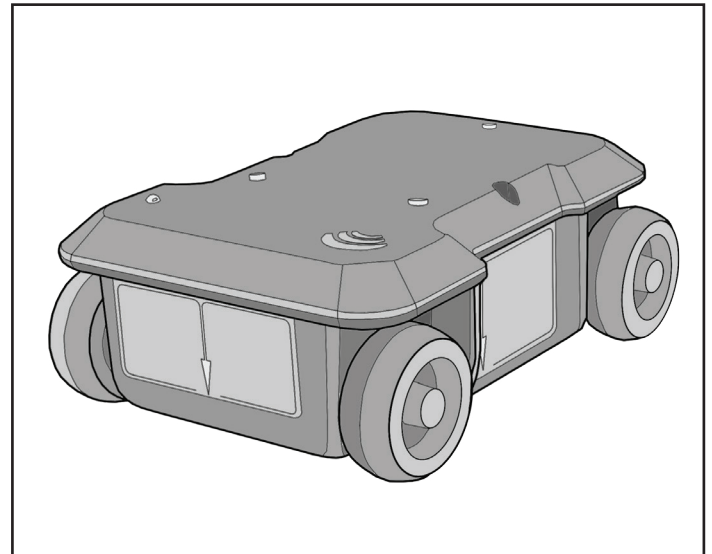


Concretto

Wall Penetrating Radar

Technical Specifications Sheet

Latest update: August 2018



What Concretto is

The Concretto is an Ultra-Wideband (UWB) shielded pulsed Wall Probing Radar (WPR) for non-destructive imaging of subsurface structures. It comprises of a transmitter and receiver boards and antennae, a controller board and a distance measurement device.

What Concretto is used for

The Concretto has a wide variety of usages including but not limited to underground utility detection, non-destructive concrete structure analysis, rebar detection, road inspection, cracks and faults localization in concrete and asphalt structures, wire and pipe mapping in buildings, etc. It is designed to withstand the harsh conditions of construction sites.

Technical Specifications

Frequency Bandwidth	200 MHz - 4000 MHz	Batteries	10 x 900 mAh NiMH 1.2 V
Central Frequency	2000 MHz	Autonomy w/ One Charge	8 h
Operating Time Windows	7.5ns / 14ns	Charge Time	1.5 h
Dynamic Range	120 dB min	ADC Range	8 bits
Horizontal Resolution	0.001 m	Data Acquisition Rate	18.2 traces/second
Vertical Resolution	0.001 m	Samples per Trace	585
Pulse Repetition	1 MHz	GPR Interface	UART over USB
Pulse Length	600 ps	Operating Temp Range	-5° C to 40° C
Pulse Energy	30 V	Water Resistance	IP 52
Pulse Rise Time	200 ps	Size	14.5/20/8 cm
Peak Tx Power	3 W	Weight	1 kg
Power Consumption	110 mAh		