

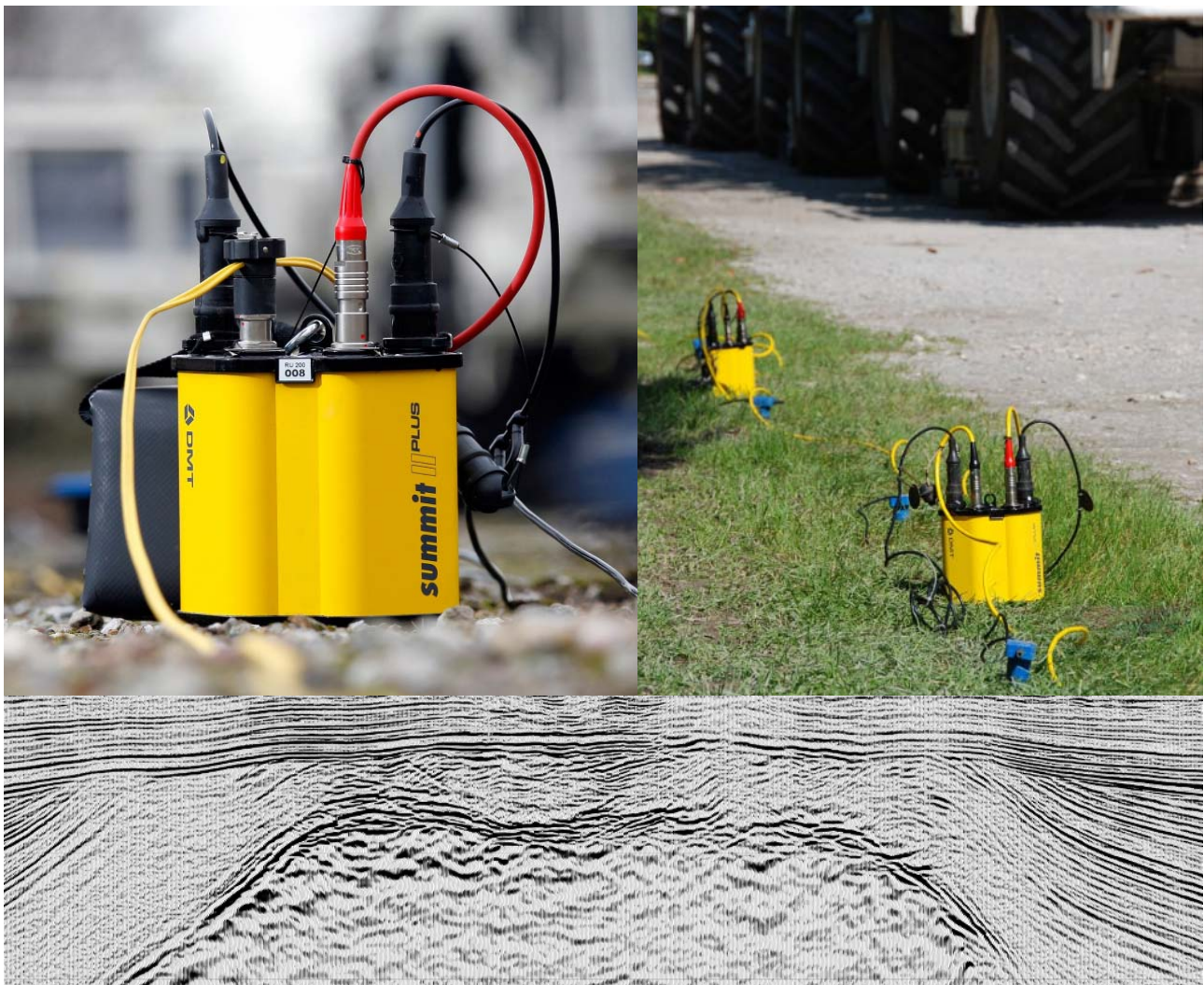
SUMMIT II Plus

The Seismic 'Flexibility System'!

The SUMMIT II Plus is the most flexible seismic acquisition system: With two-channel boxes linked with a lightweight line cable at any position, every station distances can be realised with the same cable. This SUMMIT 'Snap-on' technology provides the best solution for near surface 2D and 3D seismic measurements with station distances in the range from one to twenty meters.

Specialised for Mining Exploration!

- Optimised for high-resolution 2D / 3D surveys through its flexibility
- Fast and easy setup due to its unique snap-on technology
- Extremely robust, lightweight metal casing
- Supreme service via rapid reaction support hotline



Technical Specifications

Sample Interval	1/48, 1/32, 1/16, 1/8, 1/4, 1/2, 1, 2, 4, 8 ms
Record Length	0.5 K samples, ..., 120 K samples
Preamp Gain	0 dB, 20 dB or 40 dB
A/D Converter	24 bit delta sigma technology
Maximum Input Signal	2.0 Volt RMS 5.6 Volt peak to peak
Input Impedance	20 kOhm
Instantaneous Dynamic Range	≥ 120 dB @ 2 ms sampling interval
Equivalent Input Noise	Less than 0.2 µV RMS @ 2 ms sampling interval and 40 dB preamp gain
Crosstalk	≥ 112 dB (between channels)
Total Harmonic Distortion	≤ 0.0008 %
Common Mode Rejection Ratio	≥ 100 dB
Gain Accuracy	Typical 1 % (between all channels)
Time Accuracy	Typical 5 ppm (between all channels)
Power Supply	+ 9 - 36 VDC central or local
Dimensions	19.0 x 16.6 x 8.0 cm
Weight	1.2 kg

Analogue Anti-Alias Filter	7.2 kHz 6 dB/octave
Analogue Low-Cut Filter	1 Hz 6 dB/octave
Digital Anti-Alias Filter	0.8 x Nyquist
Rejection at Nyquist Frequencies	-120 dB
Pass Band Ripple	+/- 0.05 dB
Built-In Test Functions	- Sine wave - Pulse - Instrument noise - Geophone step - Sweep transfer - Auto correlation - Cross correlation
System Check	- Battery status - Equivalent input noise - Total harmonic distortion - Instantaneous dynamic range - Common mode rejection - Cross talk - Time accuracy
Geophone Check	- Impedance - Damping - Natural frequency - Noise - Leakage

Subject to technical changes

Environmental Specifications

Operation Temperature	-30°C to + 70°C
Humidity Range	0 – 95 %
Case	Solid waterproof metal housing deployable in any surface environment

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Overall System Performance and Flexibility

Typical Shot Cycling Time

- 10 seconds @ 1 ms sampling rate
- 2 K trace length with 256 channels inclusive data storage; reduced by using multiple USB

Mobile System Control

- Via easy to handle standard PC / Laptop

Cables

- Simple low cost two-conductor wire for Snap-on technology or alternatively configured four wire round cable

Connectors

- Geophone or string connector
- Snap-on connector for variable line position or push-pull connectors with fix line length and central power supply

Line Length

- Unlimited by using Repeater Units every 330 m

Cross Lines

- Realised by Repeater Units deploying as Cross or Distribution Units