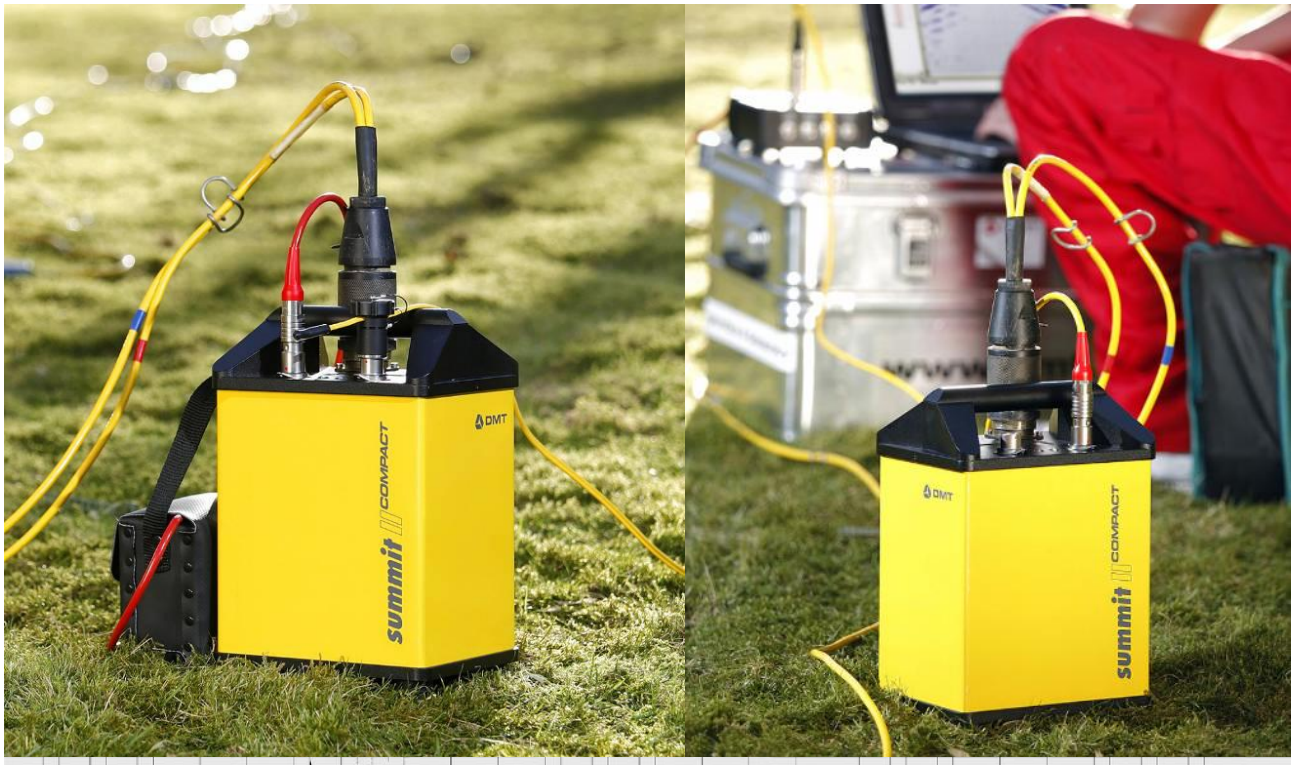
SUMMIT II Compact

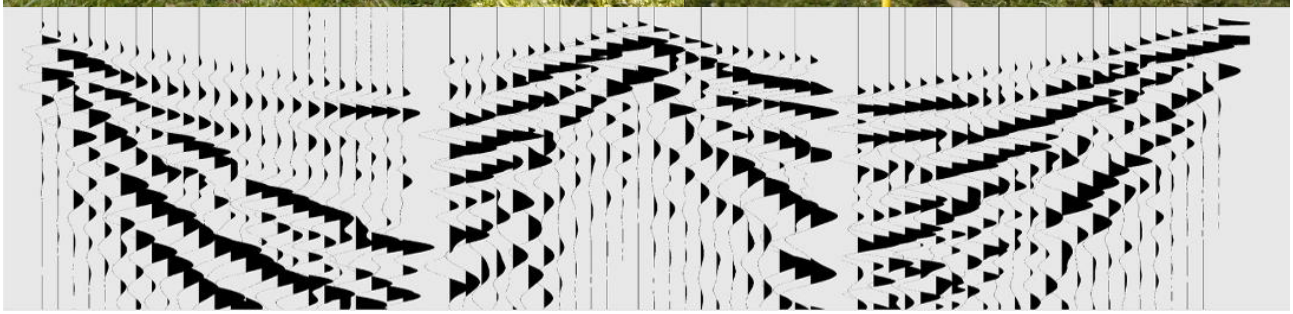
The Seismic ‘Productivity System’!

The SUMMIT II Compact is the most productive and robust seismic acquisition system for LVL measurements, borehole tomography, and VSP surveys: The twenty-four channel box in a solid metal casing with the SUMMIT ‘Plug & Trace’ technology can be used in any environment for high speed production. The seismograph works as a stand alone system or several boxes can be linked together with the ‘Snap-on’ line cable to comprise a multi-channel seismic acquisition system.

Specialised for LVL and Engineering Seismics!

- Highest productivity due to its sophisticated system design
- For specialist applications such as LVL and engineering surveys
- 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 Rejection	≥ 112 dB (between channels)
Total Harmonic Distortion	≤ 0.0008 %
Common Mode Rejection	≥ 100 dB
Gain Accuracy	Typical 1 % (between all channels)
Time Accuracy	Typical 5 ppm (between all channels)
Power Supply	+ 9 - 18 VDC @ 0.2 W / channel
Dimensions	20.0 x 15.0 x 29.0 cm
Weight	4.9 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
Passband 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

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

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
- 55 pin plug analog input connector
- Snap-on connector, four-wired round cable or direct USB 2.0
- Trigger input for direct USB 2.0 version

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TÜV NORD GROUP

DIN EN ISO 9001 certified | DIN EN ISO 14001 certified

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