

# ABEM Terraloc Pro

## SEISMIC SOLUTIONS

Well-rounded seismograph for any application

ABEM Terraloc Pro is a versatile seismograph designed for a wide range of applications including; geological mapping, determining depth to bedrock, bedrock quality, soil stability and finding fractures and weak zones.

## General

<b>Power</b>	2x 12 V, 8 Ah internal NiMH power pack 10-34 VDC external power
<b>Power consumption</b>	30/60 W (idle/acquisition)
<b>Ambient temp</b>	- 20° C to + 55° C (operating) <sup>1,2</sup> - 30° C to + 70° C (storage) <sup>3</sup>
<b>Casing</b>	Rugged aluminum alloy, meets IEC IP66
<b>Weight, 24 channels</b>	10 kg
<b>Weight, 48 channels</b>	11 kg
<b>Dimensions</b>	(WxLxH) 39x21x32 cm
<b>Connectors</b>	12 channels: 1x NK-27 24 channels: 2x NK-27 48 channels: 2x KPT 55
<b>GPS</b>	50 channels SirFstarIII chip

Note 1: Measuring speed may be reduced in high ambient temperature combined with high output power

Note 2: The performance of the LCD is not guaranteed below 0°C

Note 3: Non condensing

## Receiver

<b>Number of channels</b>	12, 24 and 48
<b>Additional channels</b>	Easily obtained by linking two or more units together
<b>Up-hole channels</b>	Yes, 2 additional independent
<b>Sampling rate</b>	100 Hz - 50 kHz (20 µs - 10 ms) (user selectable)
<b>Record length</b>	Up to 480 000 samples /ch. equivalent to: <sup>^</sup> 5,1 ms - 80 min (user selectable)
<b>Pre-trig record</b>	0-100 % of record length (user selectable)
<b>Delay time</b>	Up to 2 minutes (user selectable)
<b>Stacking</b>	32 bits, up to 999 impacts (user selectable)
<b>Unstack</b>	Remove last shot from stack (user selectable)
<b>Trigger inputs</b>	Trigger coil, make/break, geophone and TTL
<b>A/D converter resolution</b>	24 bits
<b>Dynamic range</b>	(theoretical/measured) 144 dB / >120 dB
<b>Input voltage range</b>	0.5 Vpp, 5 Vpp, 12.5 Vpp (selectable)
<b>Input gain</b>	0 dB, 12 dB, 24 dB, 36 dB, 48 dB (selectable)
<b>Input impedance</b>	3 kOhm, 20 kOhm, 20 MOhm (selectable)
<b>Frequency range</b>	DC to 20 kHz
<b>Total harmonic distortion</b>	0.0005 %
<b>Crosstalk</b>	-120 dB
<b>Noise monitor</b>	Amplitude
<b>Anti-alias filters</b>	Set automatically based on sampling rate



## Post recording features

Digital filters	Band-pass, low-pass, high-pass, band-reject and remove DC offset
Spectrum analysis	Any single trace, FFT analysis
Velocity analysis	On-screen analysis of refractor velocity
First arrivals picking	Automatic or manual
	Times can be saved with record
Pre-stack correlation	Yes, cross-correlation with reference or any other channel

## Integrated Field PC

Processor	Low power Intel Atom 1.6 GHz
Operating system	Windows XP Pro
Internal RAM	2 GB
Hard disk capacity	100 GB or greater
Display	8,4" Active TFT LCD, full colour, daylight visible, with 6 mm shatterproof glass, resolution of 800x600
External displayport	VGA output
I/O port	Wi-Fi 3xUSB 2.0 ports
Network interfaces	1x Gigabit Ethernet in RJ-45, 2x TP-10/100 in KPT08
WLAN interface	a/b/g with built-in antenna



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