

508^{XT} Specifications

Central Unit

SCI-508	
Functions	<ul style="list-style-type: none"> • Shooting system management • Aux channels recording • External GPS synchronisation • Network management
Operating voltage	110/220 VAC, 50/60 Hz
Power consumption	10 W
Operating temperature	0°C to 45°C (32°F to 113°F)
Operating conditions	Altitude < 2000 meters
Dimensions (HxWxD)	2U 19" rackable, 88.9 x 482.6 x 400 mm (3.5 x 19 x 15.7 in.)
Weight	4 kg (8.82 lbs)

Field Equipment

FDU-508		
	FDU-508	TZ FDU-508
Functions	<ul style="list-style-type: none"> • Data filtering, compression & time stamping • Data transmission with CRC control • 24 bits A/D conversion • Instrument tests : noise, gain, phase, distortion • sensor tests : resistance, tilt, leakage, noise 	
Sample rate	4, 2, 1, 0.5 ms	
Time standard	Synchronous to GPS clock	
Input impedance differential mode	20 kΩ // 77 nF	
Full scale	1.6 V RMS (0dB), 400 mV RMS (12 dB)	
Noise (3-200 Hz)	450 nV RMS (0dB), 145 nV RMS (12 dB)	
Instant dynamic range	130 dB	
System dynamic range	140 dB	
Distortion	-110 dB	
Gain accuracy	< 0.1%	
Phase accuracy	< 20μs	
Low cut filter	Selectable : (None, 0.15625 Hz, 0.3125 Hz, 0.625 Hz, 1.25 Hz, 2.5 Hz)	
High cut filter	0.8 FN linear or minimum phase	
Interval between FDU	Up to 70m	
Power consumption	105 mW	
Operating temperature	-40°C to 70°C (-40°F to 158°F)	
Operating type	Onshore	Transition Zone / Offshore
Weight	0.470 kg / 1.04 lbs	1.235 kg / 2.20 lbs
Dimension (HxWxD)	86.2 x 76 x 248 mm (3.4x3.0x9.7 in.)	125 x 76 x 400 mm (4.9x3.0x15.8in.)
Waterproofness	Up to 5 m	Up to 25 m ⁽¹⁾

(1) with specific handling care above 15 m

DSU1-508

Operating type	Onshore
Functions	<ul style="list-style-type: none"> • Data filtering, compression & time stamping • Data transmission with CRC control • Acceleration measurement • Instrument tests : gain, phase, distortion • Sensor tests : noise, distortion, tilt
Sample rate	4, 2, 1, 0.5 ms
Time standard	Synchronous to GPS clock
Bandwidth	0-800 Hz
Full scale	5 m/s ²
Noise (10-200Hz)	15 ng/√Hz
System dynamic range	128 dB
Distortion	-90 dB
Gain accuracy	< 0.25%
Phase accuracy	< 20 μs
Power consumption	85 mW
Weight	0.485 kg / 1.07 lbs
Dimension (HxWxD) (with spike)	176.8 x 76.4 x 248 mm (6.9x3.0x9.7 in.)
Operating temperature	-40°C to 70°C (-40°F to 158°F)
Waterproofness	Up to 5 m

CX-508

	CX-508	TZ CX-508
Functions	<ul style="list-style-type: none"> • Supply clock and power to connected FDU/DSU • Store data locally (32 GB memory) • Transmit data to CU via network with error recovery 	
Operating voltage	10.5 - 15 V DC	
Line data rate	10 - 20 - 40 Mbps	
Maximum number of channels per line	2,400 @2 ms real-time	
Transverse data rate	1 Gbps	
Maximum number of channels per transverse	100,000 @2 ms real-time	
Power consumption	<ul style="list-style-type: none"> • Line only : 3 W in acquisition, 1 W in standby • With transverse : 7 W in acquisition, 2 W in standby 	
Dimension (HxWxD)	158 x 218 x 342.4 mm (6.2x8.6x13.5 in.)	
Operating temperature	-40°C to 70°C (-40°F to 158°F)	
Operating type	Onshore	Transition Zone / Offshore
Weight (w/o batterie)	3.8 kg / 8.38 lbs	11 kg / 24.25 lbs with cage
Waterproofness	Up to 15 m	Up to 25 m

ERB-508

Functions	<ul style="list-style-type: none">• Wireless data transfer between CX-508• Can be used instead of a line or transverse
Transmission rate	100 Mbps
Range	<ul style="list-style-type: none">• Up to 1km using the included tripod• Up to 15 km using a higher mast
Voltage	12 V
Power consumption	10 W on each side
Operating temperature	-40°C/+60°C (-40°F/+140°F)
Operating conditions	IP67

LRC-508

	LRC-508	TZ LRC-508
Operating type	Onshore	Offshore on a buoy
Functions	<ul style="list-style-type: none">• Wireless QC transfer between CX-508• QC Mesh radio network	
Transmission rate	1,2 Kbps	
Range	Up to 1 km	
Voltage	12 V	
Power consumption	<ul style="list-style-type: none">• Continuous transmission at full power: 2 W• Reception mode: 0.4 W	
Operating temperature	-40°C to 70°C (-40°F to 158°F)	
Operating conditions	IP68	

Peripherals

DT-508

Functions	<ul style="list-style-type: none">• Assignment of field units to stake locations• Management of the field equipment inventory
RFID distance	50 cm
Field equipment compatible	FDU-508 ; DSU-508 ; CX-508 ; TF01-508
Operating temperature	-20°C/+50°C (-4°F/+122°F)
Operating conditions	IP65

FT-508

Functions	Troubleshooting complete lines of field units (FDU-508 & DSU-508)
Instrument tests	<ul style="list-style-type: none"> • Noise • Gain • Phase • Distortion • Pulse • CMRR
Field Tests	<ul style="list-style-type: none"> • Noise • Resistance • Tilt • Tilt model • Leakage • Impulse • Distortion
Capacity	1 line of 3000 FDU-508 or DSU-508 maximum
Operating temperature	-20°C/+50°C (-4°F/+122°F)
Operating conditions	IP65

DH-508

Functions	Harvest of seismic and test data of a single CX-508 or a complete autonomous line
Capacity	~2000ch @ 2ms for 12h of continuous acquisition
Operating temperature	-20°C/+50°C (-4°F/+122°F)
Operating conditions	IP65

Channel capacity between CX-508

Distance between RPs	FDU-508	DSU1-508
13.75 m /45 ft	96	106
27.5 m /90 ft	80	92
55 m /180 ft	64	74
70 m /230 ft	60	68

Line cable

	Land cable	TZ cable
Operation type	Onshore	Transition Zone / Offshore
Maximum length	–	–
Weight	43 kg/km	83 kg/km
Breaking strength bulk cable	150 daN	350 daN
Breaking strength with connectors	120 daN	300 daN
Waterproofness	Up to 5 m	Up to 25 m ⁽¹⁾

Transverse cable

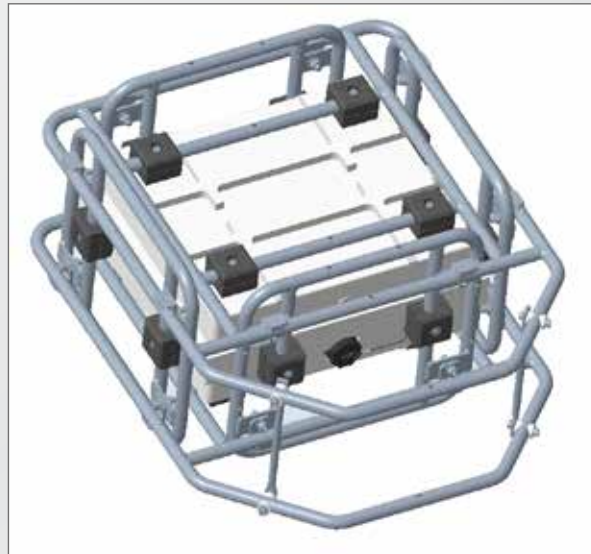
	TFOI-508	TZ TFOI-508
Operation type	Onshore	Transition Zone / Offshore
Maximum length	2 km	2 km
Weight	45 kg/km	140 kg/km ⁽²⁾
Breaking strength bulk cable	300 daN	300 daN
Breaking strength with connectors	170 daN	300 daN ⁽²⁾
Waterproofness	Up to 15 m	Up to 25 m ⁽¹⁾

(1) with specific handling care above 15 m
(2) with stainless steel cable

Energy Packs

	TZ Energy Pack 182AH	TZ Energy Pack 364AH
Energy	2640 Wh	5320 Wh
Capacity	182 Ah	364 Ah
Nominal Voltage	14,6 V	14,6 V
Max. intensity for charge and discharge	20 A	20 A
Typical duration for complete charging	10 hours	20 hours
Dimensions	355 x 255 x 180 mm	355 x 405 x 180 mm
Weight (in air)	28 kg	49 kg
Weight (in water)	14 kg	26 kg

Note: Sercel reserves the right to change its specifications without prior notice.
All specifications are typical at 25°C



Sercel - France

16 rue de Bel Air
B.P. 30439 - 44474 CARQUEFOU Cedex
Téléphone: (33) 2 40 30 11 81
Fax: (33) 2 40 30 19 48
E-mail: sales.nantes@sercel.com
SAS au capital de 2 000 000 €
Siège Social: 16 rue de Bel Air - 44470 CARQUEFOU
378.040.497 R.C.S. Nantes Code APE 2651B

Sercel Inc. - U.S.A.

17200 Park Row
Houston, Texas 77084
Telephone: (1) 281 492 6688
Fax: (1) 281 579 7505
E-mail: sales.houston@sercel.com

www.sercel.com

© Sercel 04/19



Ahead of the CurveSM