

Resistance Wire

Extensometer



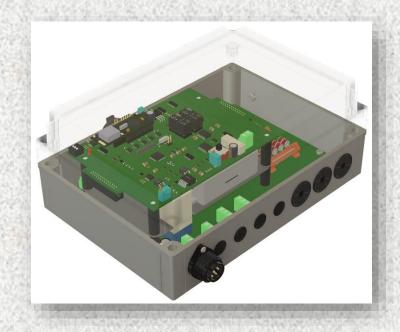
**Rod Extensometer** 



Borehole Extensometer







### OEM EXTENSOMETER DATA LOGGER FEATURES

Available in 8-ch and 24-ch options Measure up to 24 single ended voltage transducers For use with Voltage based instruments, Extensometers and Crack meters. Measure up to 3 x 6 Channel Extensometers with lead wire compensation Measure up to 6 Crack meters with lead wire compensation Data logging of attached instruments with time and date stamp In built transient suppression on all channels (lightning protection) Integrated alarm outputs. Two normally open or normally closed relay contacts capable of switching maximum 2A current Intuitive GUI software for configuring inputs, scheduling alarms and uploading stored data

#### OPTIONS

OEM EXTENSOMETER DATA LOGGER 10W Solar panel /charger kit for charging of internal sealed lead acid battery

RS232 and USB access port options for local administration and data recovery

GSM and FTP modem options for remote administration, data recovery and SMS notification of alarm conditions

LoRa WAN Long range wireless communications

Custom powder coated / stainless steel IP66 rated enclosure available on request

#### OEM EXTENSOMETER LOGGER APPLICATIONS

The Extensometer Logger is an 8/24 channel data acquistion sytem designed specifically for long term field deployment. The cost effective glass filled polycarbonate enclosure offers dust and moisture ingresss protection and is able to be mounted within a steel enclosure should additional environmental protection be required.

The Exto Logger is compatible with indusrty standard voltage transducers for the measurement of the following parameters:-

- Extension
- Displacement
- Landslip
- Cracks
- Settlement, heave and shrinkage
- Construction joints
- Structural health

#### COMPATIBLE INSTRUMENTS

The following types of instruments are supported by the OEM Exto Logger :-

- Resistance Wire Extensometers
- Displacement Transducers
- Crack meters
- Convergence Monitors
- Linear Potentiometer

# OEM EXTENSOMETER DATA LOGGER

# WINDOWS BASED GUI FOR SYSTEM CONFIGURATION AND DATA STORAGE / RETRIEVAL

	Cadeanco www.cadeanco.com.au	
Voltage 1	Logger Communication Int	erface
	Exto-Logger OK 3333-A Exto-Log Software Version 4.02-A, 09/11/2010 Site: EXL Logger #3333 Scans Stored: 1 Scans Free: 2334 Scan Interval: Scanning Disabled! Alarm Status: All Alarms Disabled Battery Voltage: 11.58 volts Modem Access Time: 12:00	
	System Settings 🛛 🔻	
	The SYSTEM SETTINGS command reads the current system values of the logger.	
CLOSE	Transmit command via the SEND button	UPDATE

Alarm Configuration Interface								
CH 1 · 8	100	200	300	400	500	600	700	800
CH 9-16	900	1000	1100	1200	1300	1400	1500	1600
CH 17 - 24	1700	1800	1900	2000	2100	2200	2300	2400
	SIGNAL		Alarms: Disa Alarm Check Sense Direct	: With Data	reshold		ENABLE AL	L)
	AL TEST		Signal Mode Dial-out: Ena Number 1: 0	: Self Clearin abled 419396137			1M SCANS	
			Number 2: 0 Number 3: 0 Signal State:	409396137 None				_
	UMBERS)			arm Status	OLDS )		RESET	
	TURN		~ <u>~</u>				UPDAT	

## EXL8 SPECIFICATIONS

# OEM EXTENSOMETER DATA LOGGER

PROUDLY AUSTRALIAN DESIGNED AND BUILT



PHYSICAL S	SPECIFIC/	ATIONS:
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Size:	140mm high x 230mm wide x 100mm deep		
Weight:	1.2Kg		
Material:	Grey polycarbonate case with clear lid		
Sealing:	Dependant on supplied external case		
Temperature:	Operating Temperature-20°C to +55°CStorage Temperature-25°C to +70°C		

#### ELECTRICAL SPECIFICATIONS

Power:	External Battery required Suggested minimum: Sealed Lead Acid, 12V, 1.3Ah 240V Plug-pack Charger Module supplied
Options:	10W Solar Charger
Data Logging:	
Input Channels: Excitation: Resolution: Digital Filtering:	Up to a maximum of 8 via single 8-ch input 1 x 4v regulated plus 1 x fused 12v, 150mA per input 1uV 64 sample integration
Storage Capacity:	in the second second second
Extensometer:	1 instrument, 6 anchors per extensometer Up to 21833 scans
Voltage Input:	Up to 8 single-end inputs, 4V max input level Up to 21833 scans with 8 inputs connected.
Crackmeter:	Up to 2 instruments Up to 21833 scans with a single crackmeter.
Data Backup:	150 years without primary power
Logger Timing:	Real-time clock, non-volatile operation
Scanning Intervals:	1-min, 10-min, 1-hour, 6-hour, 12-hour, 24-hour Manual trigger mode via computer interface

Alarm Logging (not available for LoRaWAN):

OEM EXTENSOMETER DATA LOGGER





Logging Control:	Global enable/disable of all alarm functions
Scan Rate:	Synchronous with data or 1-minute intervals
Trigger Level:	Individual channel threshold value set by operator
Trigger Sensing:	Threshold crossed in either [+ve] or [-ve] direction
Signal Mode:	Set by operator to either Latched or Self-clear mode
Signal Outputs:	Integrated alarm with 2 isolated relay terminals Maximum relay current of 2A SMS alert option when a modem is fitted

#### Communications:

Baud Rate:	9600 baud, 8 data, 1 start, 1 stop, no parity
Data Format:	Data (mV units), Time, Date
Data Separator:	Tab/CSV separated columns, ASCII text format
Data Recovery:	Custom WINDOWS Interface software USB Memory Device GSM Modem FTP Modem LoRa WAN (data pushed with scan)

#### Modem Options:

Туре:	Intellimax+4G (GSM or FTP Modes available)
GSM Comms Rate:	9600 Baud, Non-transparent mode
FTP Mode:	Includes a default time window for remote bidirectional communication with logger
SIM Card:	Micro-SIM

Cadeanco is continually improving its products and processes and as such, information contained within this document is subject to change without notice.

## **EXL24 SPECIFICATIONS**

# OEM EXTENSOMETER DATA LOGGER

PROUDLY AUSTRALIAN DESIGNED AND BUILT



PHYSICAL	SPECIFICATIONS:
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Size:	180mm high x 255mm wide	x 105mm deep	
Weight:	1.3Kg		
Material:	Grey polycarbonate case wit	th clear/smoke lid	
Sealing:	Dependant on supplied external case		
Temperature:	Carlos and the second second second second	-20°C to +55°C -25°C to +70°C	

#### ELECTRICAL SPECIFICATIONS

Power:	External Battery required Suggested minimum: Sealed Lead Acid, 12V, 1.3Ah 240V Plug-pack Charger Module supplied
Options:	10W Solar Charger
Data Logging:	
Input Channels: Excitation: Resolution: Digital Filtering:	Up to a maximum of 24 via 3 x 8-ch inputs 1 x 4vregulated plus 1 x fused 12v, 150mA per input 1uV 64 sample integration
Configurations:	
Extensometer:	Up to 3 instruments, 6 anchors per extensometer Up to 21833 scans with a single extensometer connected
Voltage Input:	Up to 24 single-end inputs, 4V max input level Up to 21833 scans with 8 inputs connected.
Crackmeter:	Up to 6 instruments Up to 21833 scans with a single crackmeter.
Data Backup:	150 years without primary power
Logger Timing:	Real-time clock, non-volatile operation
Scanning Intervals:	1-min, 10-min, 1-hour, 6-hour, 12-hour, 24-hour Manual trigger mode via computer interface

Alarm Logging (not available for LoRaWAN):

OEM EXTENSOMETER DATA LOGGER





Scan Rate: Synchronous with data or 1-minute intervals	
Trigger Level: Individual channel threshold value set by operator	or
Trigger Sensing: Threshold crossed in either [+ve] or [-ve] direction	n
Signal Mode: Set by operator to either Latched or Self-clear mod	ode
Signal Outputs:Integrated alarm with 2 isolated relay terminals Maximum relay current of 2A SMS alert option when a modem is fitted	

#### Communications:

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Baud Rate:	9600 baud, 8 data, 1 start, 1 stop, no parity
Data Format:	Data (mV units), Time, Date
Data Separator:	Tab/CSV separated columns, ASCII text format
Data Recovery:	Custom WINDOWS Interface software USB Memory Device GSM Modem FTP Modem LoRa WAN (data pushed with scan)

#### Modem Options:

Туре:	Intellimax+4G (GSM or FTP Modes available)
GSM Comms Rate:	9600 Baud, Non-transparent mode
FTP Mode:	Includes a default time window for remote bidirectional communication with logger
SIM Card:	Micro-SIM

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