

# Portable Battery Powered Hand Held Strain Gauge & Load Cell **DIGITAL INDICATOR**

**SY021  
Series**



- **Powered by 4x AA internal batteries, giving up to 45 hours use**
- **5 Digit Display**
- **Compatible with Strain Gauge Based Sensors**
- **Digital Scaling**
- **Memory for up to 50 individual calibrations per channel**
- **Peak Capture**
- **Robust Construction - Sealed to IP54**
- **Internal Shunt Calibration Feature**
- **3 YEAR WARRANTY**

#### **Options Available**

Rechargeable Alkaline Batteries & Charger

Internal Data Logger with 8000 Reading Capacity

USB Serial Data Connection

Dual Channel Version

4-20mA Input Version with 15Vdc transducer supply

## **DESCRIPTION**

The SY021 load meter is a completely portable, precision strain-gauge input instrument packaged in a small handheld ABS enclosure sealed to IP54.

Designed to be used with all types of strain gauge based sensors and transducers, it will accept an input between 0-0.5mV/V and 0-4.5mV/V.

The operator has access to a full numeric keypad. These enable all programming and operational functions to be accessed from the front panel, including tare and peak-hold.

The SY021 is available as either a 1 or 2 channel instrument with a memory of 50 load cell calibrations per channel, enabling a single instrument to be used with many different sensors. There are two methods of calibration, live load and shunt with a fine adjustment "nudge" feature.

A data logging feature is also available which can hold up to 8000 readings, taken either as a stream at up to 100/second or as 'single shots' with a date and time stamp. Data is downloaded via a USB port.

Four 'AA' size alkaline disposable or rechargeable batteries provide up to 45 hours usage before new batteries or recharging is necessary.

*Transducer Specialists...*

## **APPLIED MEASUREMENTS LIMITED**

3 MERCURY HOUSE - CALLEVA PARK - ALDERMASTON - BERKSHIRE - RG7 8PN - UK

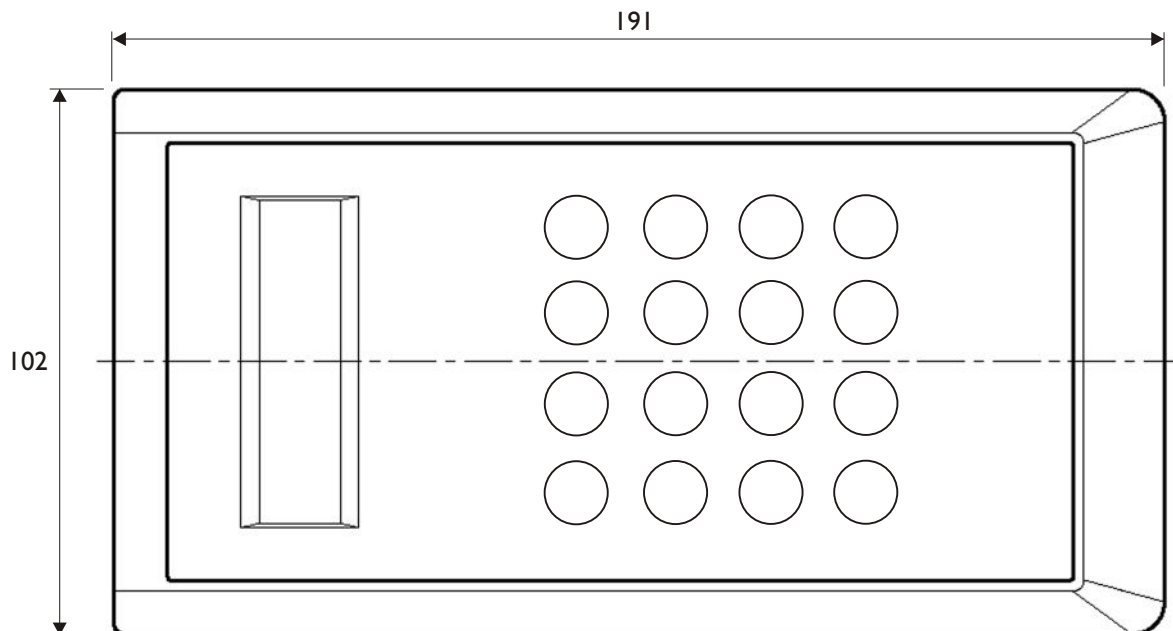
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# SPECIFICATION

CHARACTERISTICS	SY021	UNITS
Display:	5 digit LCD ( $\pm 99999$ ) (2 lines)	
Number of Channels:	1 or 2 simultaneously read (independent 2nd channel opt.)	
Accuracy:	$\pm 0.007\%$	Non-linearity as % of full scale
Bridge Excitation:	5.0 pulsed	volts dc
Input Range:	0-0.5 to 0-4.5	mV/V for display reading of $\pm 19999$
Minimum Bridge Resistance:	50ohms (6x 350ohm sensors in parallel)	
Electrical connection:	4-pin locking audio DIN connector (Binder connector opt.)	
Operating Temperature:	-5 to +50	$^{\circ}\text{C}$
Thermal Drift:	<50	ppm/ $^{\circ}\text{C}$
Integral Battery:	4x AA (re-chargeable - optional)	
Battery Life:	45 (when a 350 ohm sensor is connected)	hours
Keypad:	Tactile, Full Numeric	
Environmental Protection:	IP54 (when mating plug fitted)	
Enclosure type:	Black ABS	
Communications:	USB (optional)	
Datalogging:	8000 or 16,000 events per channel (optional)	
Conversion Rates:	6.25Hz (160ms) / 25Hz (40ms) / 50Hz (20ms) / 100Hz (10ms)	

All dimensions in millimetres



Depth: 35

