TITAN S8

Portable Data Acquisition Logger

The MadgeTech Titan S8 is a portable, multi-use data logger with eight input channels, one configurable alarm output and a user-friendly touchscreen interface. This versatile logger can measure multiple parameters in real time including temperature, current, voltage, pulse and frequency. It also supports thermocouple, RTD or thermistor probes. This adaptability and power make Titan S8 the perfect companion for any industrial engineer, quality assurance professional, compliance officer or automotive technician.

Part of the Titan S8's strength comes from its independence. Unlike many data loggers, the Titan is a complete, all-in-one solution that does not require a PC or any downloaded software for operation. This means the device is truly ready for use at a second's notice and will never leave users waiting because of upload times or a frustrating software interface.

5 INCH TOUCH SCREEN

16-BIT HIGH RESOLUTION

DISPLAY ROTATION

REAL-TIME DATA VISUALIZATION

ON-SCREEN ALERTS

WIRING DIAGRAM

ON-SCREEN KEYBOARD

WIFI CONNECTIVITY

ETHERNET CONNECTIVITY

Features

- Simultaneously Records 8 Different Parameters
- Download Data Via USB
- 1 GB Internal Memory
- Programmable Engineering Units
- No Required Software
- Rechargeable Battery
- Charger Included
- 1 Configurable Alarm Output

Applications

- HVAC Performance
- Energy Audits
- Automotive Safety Engineering
- Electronic Manufacturing
- Plant/Factory Performance
- Laboratory & Life Sciences
- Industrial Equipment Repair
- Food Safety

MADE IN THE USA

InstruMetrics ENGINEERING

MADGETECH WE BUILD DATA LOGGERS

SPECIFICATIONS

Specifications subject to change. See MadgeTech's Terms and Conditions at **madgetech.com**.

GENERAL	
Dimensions	6.65 in x 4.40 in x 1.41 in (168.9 mm x 111.8 mm x 35.8 mm) *Data logger only*
Touch Screen Dimensions	5 inches
Number of Channels	8 inputs and 1 alarm output
Weight	1.3 lbs (20.8 oz)
IP Rating	IP20
Start Modes	Immediate Start & Delay Start
Memory	1.8 GB, with session size of 1,000,000 or 5,000,000 readings
Battery Type	Rechargeable 3.7 V Lithium Ion Battery Pack
Battery Life	Continuous on-screen sampling: 7–9 hours depending on display setting and reading rate
Data Format	Exported .csv file format, .mtb or both
Time Accuracy	±1 minute/month
Operating Environment	0 °C to +50 °C (32 °F to +122 °F) 0 %RH to 95 %RH non-condensing
Enclosure Material	Polycarbonate, TPE Protective Boot
Calibration	Factory calibration is recommended annually
Alarm Output	50 mA @ 100V, Solid State Relay Output

0 - 24 mA	
Range	-5 mA to 50 mA
Resolution	0.0001 mA
Accuracy	±0.024 mA (0 to 24 mA)
Input Impedance	30 Ω

0 - 100 mV	
Range	-100 mV to 2450 mV
Resolution	0.001 mV
Accuracy	±0.1 mV (0 to 100 mV)
Input Impedance	1 GΩ
Maximum Voltage	3.0 V

0 - 10 V	
Range	-0.5 V to 12.5 V
Resolution	0.001 V
Accuracy	± 0.01 V (-0.5 V to 12.5 V)
Input Impedance	1 GΩ
Maximum Voltage	25 V

FREQUENCY / PULSE	
Maximum Count	4,000,000,000
Maximum Frequency	25 KHz
Input Signal	0 V to 12 V
Input Impedance	58 KΩ

TEMPERATURE PT-100 (2, 3, 4-WIRE RTD) (0.00385 CURVE)	
Range	-200 °C to +850 °C (Probe Dependent) (18.5 Ω to 390.5 Ω)
Resolution	0.01 °C
Accuracy	±0.1 °C (-200 °C to +400 °C) (Probe Dependent) ±0.034 Ω (18.5 Ω to 247.1 Ω)

TEMPERATURE NTC-1 (2252)	
Range	-25 °C to +150 °C (Probe Dependent) (29,380 Ω to 41.9 Ω)
Resolution	0.01 °C
Accuracy	±0.50% FSR (Probe Dependent)

TEMPERATURE NTC-2 (10K)	
Range	-25 °C to +150 °C (Probe Dependent) (102,900 Ω to 238 Ω)
Resolution	0.01 °C
Accuracy	±0.50% FSR (Probe Dependent)

BATTERY WARNING: Battery may explode or catch fire if mistreated. Do not disassemble or dispose of in fire. Do not charge except specified with charging condition. Do not heat above 212 °F, or short circuit. Do not crush or modify.

RTD Note (All RTD Configurations)
Temperature Specifications based on ideal 100 Ω PT RTD Complaint with IEC 751(1983) and ITS-90. Accuracy based on 4-wire configuration.

THERMOCOUPLE TYPE	RANGE	RESOLUTION	ACCURACY*
J	-200 °C to +760 °C	0.1 °C	±0.5 °C
K	-270 °C to +1370 °C	0.1 °C	±0.5 °C
T	-270 °C to +400 °C	0.1 °C	±0.5 °C
E	-270 °C to +980 °C	0.1 °C	±0.5 °C
R	-50 °C to +1760 °C	0.5 °C	±2.0 °C
S	-50 °C to +1760 °C	0.5 °C	±2.0 °C
N	-270 °C to +1300 °C	0.1 °C	±0.5 °C
B	50 °C to 1820 °C	0.5 °C	±2.0 °C

*Thermocouple accuracy specified with 24 AWG diameter thermocouple wires. Accuracy does not include Cold Junction Compensation (CJC). CJC error: ±1.5 °C.

At room temperature (25 °C ±10 °C) after 60 minute warm-up period. Temperature calibrated accuracy is thermocouple dependent.

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