TITAN S8

Portable Data Acquisition Logger



The MadgeTech Titan S8 is a portable, multi-use industrial data logger with eight probe channels and a user-friendly touchscreen interface. This versatile logger supports thermocouple, RTD or thermistor probes to measure current, voltage, temperature and pulse in real time. 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 might 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**



REAL-TIME DATA VISUALIZATION



ON-SCREEN KEYBOARD



16-BIT HIGH RESOLUTION



ON-SCREEN **ALERTS**



BUILT-IN **TROUBLESHOOTING**



DISPLAY ROTATION



WIRING DIAGRAM





Features

- 8 Input Channels
- Download Data Via USB
- 1 GB Internal Memory
- Programmable **Engineering Units**
- No Required Software
- Rechargeable Battery

Applications

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







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		
Weight	1.3 lbs (20.8 oz)		
IP Rating	IP20		
Start Modes	Immediate Start & Delay Start		
Memory	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 Stand-by mode: 100 hours 		
Data Format	Exported .csv file format, .mtb or both		
Time Accuracy	±1 minute/month		
Operating	0 °C to +50 °C (32 °F to +122 °F)		
Environment	0 %RH to 95 %RH non-condensing		
Enclosure Material	Polycarbonate, TPE Protective Boot		
Calibration	Factory calibration is recommended annually		

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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		0.0001 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 12.0 V			
Resolution		0.0001 V			
Accuracy		± 0.01 V (-0.5 V to 12.0 V)			
Input Impedance		1 GΩ			
Maximum Voltage		25 V			

FREQUENCY / PUL	.SE			
Maximum Count	4,000,000,000			
Maximum Frequency	25 KHz			
Input Signal	0 V to 12 V			
Input Impedance	58 ΚΩ			
TEMPERATURE PT	-100 (2-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 PT	-100 (3-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) $\pm 0.034 \Omega$ (18.5 Ω to 247.1 Ω)			
TEMPERATURE PT-100 (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 NT	⁻ C-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 NT	C-2 (10K)			
Range	-25 °C to +150 °C (Probe Dependent)			
D. L.:	(102,900 Ω to 238 Ω)			
Resolution	0.01 °C			
Accuracy	±0.50% FSR (Probe Dependent)			

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.

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.

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
Т	-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
В	50 °C to 1820 °C	0.5 °C	±2.0 °C



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