# TITAN S8

**Transportable Data Acquisition Device** 





Product Brochure | EN

# TITAN S8

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.



### **FEATURES**

The entire Titan S8 device is handheld, meaning powerful data measurement, equipment validation and process monitoring can travel wherever they are needed inside or outside of any facility. Titan S8 is a powerful and flexible as you need it to be at any time, for any application.

### **COMPACT DESIGN**

Store Titan S8 in a toolkit, backpack, or jacket pocket.

### **8 CHANNEL INPUTS**

View data from multiple leads or locations at the same time.

### **PROTECTIVE BOOT**

Breathe easy knowing your device is shielded at all time. Minimize impacts with rugged, shock-absorbing rubber.



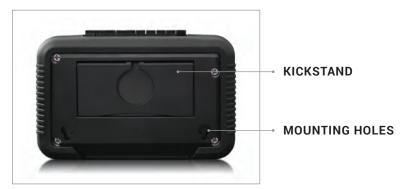
### SIDE GRIP

Hold the Titan S8 confidently with one hand while placing leads and probes.

### **5" TOUCH SCREEN**

View data on a full-color display designed for clarity and readability.

### **BACK**



### **VERSATILITY**

Perfect for those with a variety of responsibilities or validation tasks, the handheld Titan S8 provides dynamic, customizable solutions including programmable channel configurations, user-configurable engineering units and alarms for benchmark or undesirable readings. Any user-created settings can be stored within the logger, saving time and eliminating the need for constant reprogramming.



#### **HVAC PERFORMANCE**

- Room / Ambient Temperature
- Duct Temperature
- · Air Flow & Pressure



### **ENERGY AUDITS**

- · Current/Voltage Fluctuations
- Energy Consumption
- · Machine Run Time



### **AUTOMOTIVE SAFETY ENGINEERING**

- · Heat & Energy Transfer
- · Material Processes
- · Electrical Systems Analysis



### **ELECTRONIC MANUFACTURING**

- Production Equipment Monitoring
- Temperature Stability
- Voltage & Current Troubleshooting



### PLANT/FACTORY PERFORMANCE

- Diagnose Power Issues
- Electrical Infrastructure Monitoring
- · Optimize Performance



### **LABORATORY & LIFE SCIENCES**

- · Equipment Validation
- Temperature Mapping
- Process Verification



### **INDUSTRIAL EQUIPMENT REPAIR**

- Thermal & Electrical Diagnostics
- Verify Successful Repair
- · Routine Maintainence



### **FOOD SAFETY**

- Oven Mapping
- Process Monitoring
- HACCP Compliance

### **TECHNOLOGY**

The unprecedented data acquisition power of the Titan S8 comes from its incredible versatility. This single device is compatible with a variety of the most commonly used probe types and can be configured to measure a wide range of key factors.



8 INPUT CHANNELS

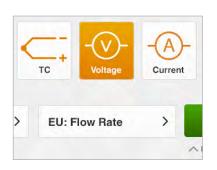
Manage a variety of incoming
data to study energy transfer and
machine performance.



USB DATA DOWNLOAD
Extract data instantaneously for upload and analysis.



**1GB INTERNAL MEMORY** Store up to 180,000,000 readings.



**ENGINEERING UNITS**Program Titan S8 to accept any units of measure.

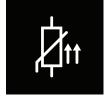


NO REQUIRED SOFTWARE Analyze data in Microsoft Excel without the need for additional software.



RECHARGEABLE BATTERY
Rechargeable lithium ion battery
designed to provide longer lasting
power per charge.

### **SENSOR TYPES**



**RTD** 

**\_**+









THERMOCOUPLE VOLTAGE

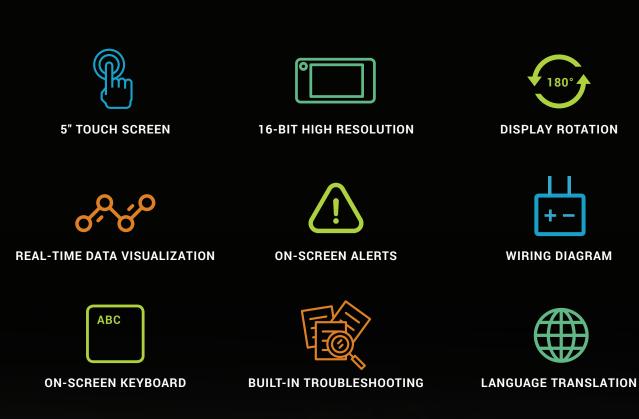
**CURRENT** 

**THERMISTOR** 

**PULSE** 

## **USER INTERFACE**

The Titan S8's easy-to-use interface allows users to view real-time data, including automatically generated graphs, in full color to enable in-the-moment analysis and decision-making.





### **SPECIFICATIONS**

Specifications subject to change without notice. Specific warranty remedy limitations apply.

### **GENERAL**

Number of Channels..... 8 Memory ...... 1,000,000 readings, 1 GB...

Operating Environment .. 0 °C to 50 °C (32 °F to +122 °F) 0 %RH to 95 %RH non-condensing

Battery Type...... Rechargeable 3.7 V Lithium Ion Battery Pack

Battery Life..... Continuous On-Screen Sampling: 9 hours

Stand-by Mode: 100 hours

6.65 in x 4.40 in x 1.41 in Dimensions.....

(168.9 mm x 111.8 mm x 35.8 mm)

Enclosure Material... Polycarbonate, TPE Protective Boot

Weight..... 1.3 lbs (20.8 oz)

IP Rating..... IP20

#### 0-24 MA

Resolution..... 0.0001 mA Accuracy..... ±0.024 mA Input Impedance ...... 30 Ω

### 0-100 MV

Maximum Voltage ...... 3.0V Resolution...... 0.001 mV Accuracy..... ±0.1 mV Input Impedance ....... 1 GΩ

### 0-10 V

Maximum Voltage Resolution..... 0.001 V Accuracy..... ± 0.01 V Input Impedance ...... 1 GΩ

### **FREQUENCY / PULSE**

Maximum Count....... 4,000,000,000 Maximum Frequency.... 20 KHz Input Signal ...... 0 V - 12 V Input Impedance ...... 58 KΩ

### **TEMPERATURE NTC-1 (2252)**

Resolution..... 0.01 °C Accuracy..... ±0.50% Range ..... -25 °C to 150 °C

### **TEMPERATURE NTC-2 (10K)**

Resolution..... 0.01 °C Accuracy..... ±0.50% Range ..... -25 °C to 150 °C

### **TEMPERATURE PT-100** (2-WIRE RTD)

Resolution ..... 0.01 °C Accuracy..... ±0.1 °C Range ..... -200 °C to 400 °C

### **TEMPERATURE PT-100** (3-WIRE RTD)

Resolution..... 0.01 °C Accuracy..... ±0.1 °C

Range ..... -200 °C to 400 °C

### **TEMPERATURE PT-100** (4-WIRE RTD)

Resolution..... 0.01 °C Accuracy..... ±0.1 °C Range ..... -200 °C to 400 °C

### **THERMOCOUPLE**

TYPE	RANGE	RESOLUTION	ACCURACY
Type J	-210 °C to +760 °C	0.1 °C	±0.5 °C
Туре К	-270 °C to +1370 °C	0.1 °C	±0.5 °C
Type T	-270 °C to +400 °C	0.1 °C	±0.5 °C
Type E	-270 °C to +980 °C	0.1 °C	±0.5 °C
Type R	-50 °C to +1760 °C	0.5 °C	±2.0 °C
Type S	-50 °C to +1760 °C	0.5 °C	±2.0 °C
Type B	+50 °C to +1820 °C	0.5 °C	±2.0 °C
Type N	-270 °C to +1300 °C	0.1 °C	±0.5 °C

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