

# TITAN S8

Transportable Data Acquisition Device



# 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



KICKSTAND

MOUNTING HOLES

# 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



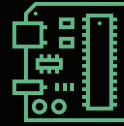
## ENERGY AUDITS

- 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 Maintenance



## 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.



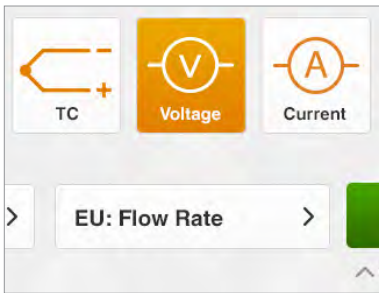
**8 INPUT CHANNELS**  
Manage a variety of incoming data to study energy transfer and machine performance.



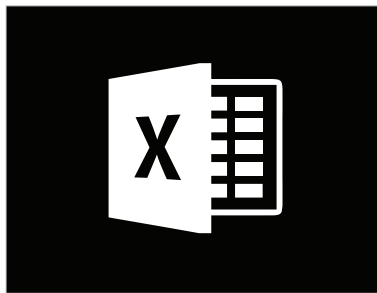
**USB DATA DOWNLOAD**  
Extract data instantaneously for upload and analysis.



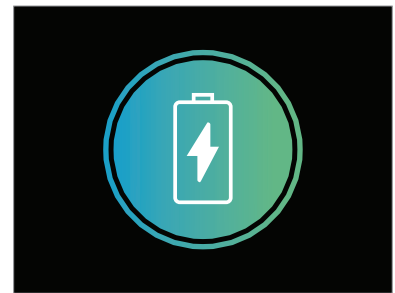
**1GB INTERNAL MEMORY**  
Store up to 180,000,000 readings.



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

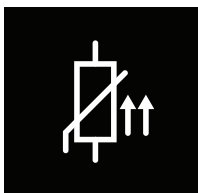


**NO REQUIRED SOFTWARE**  
Analyze data in Microsoft Excel without the need for additional software.

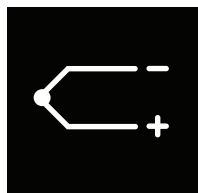


**RECHARGEABLE BATTERY**  
Rechargeable lithium ion battery designed to provide longer lasting power per charge.

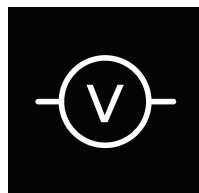
## SENSOR TYPES



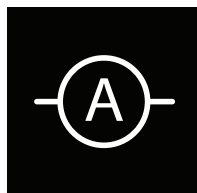
RTD



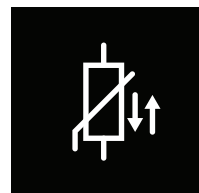
THERMOCOUPLE



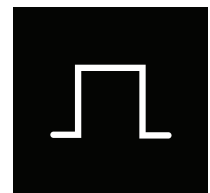
VOLTAGE



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.



5" TOUCH SCREEN



16-BIT HIGH RESOLUTION



DISPLAY ROTATION



REAL-TIME DATA VISUALIZATION



ON-SCREEN ALERTS



WIRING DIAGRAM



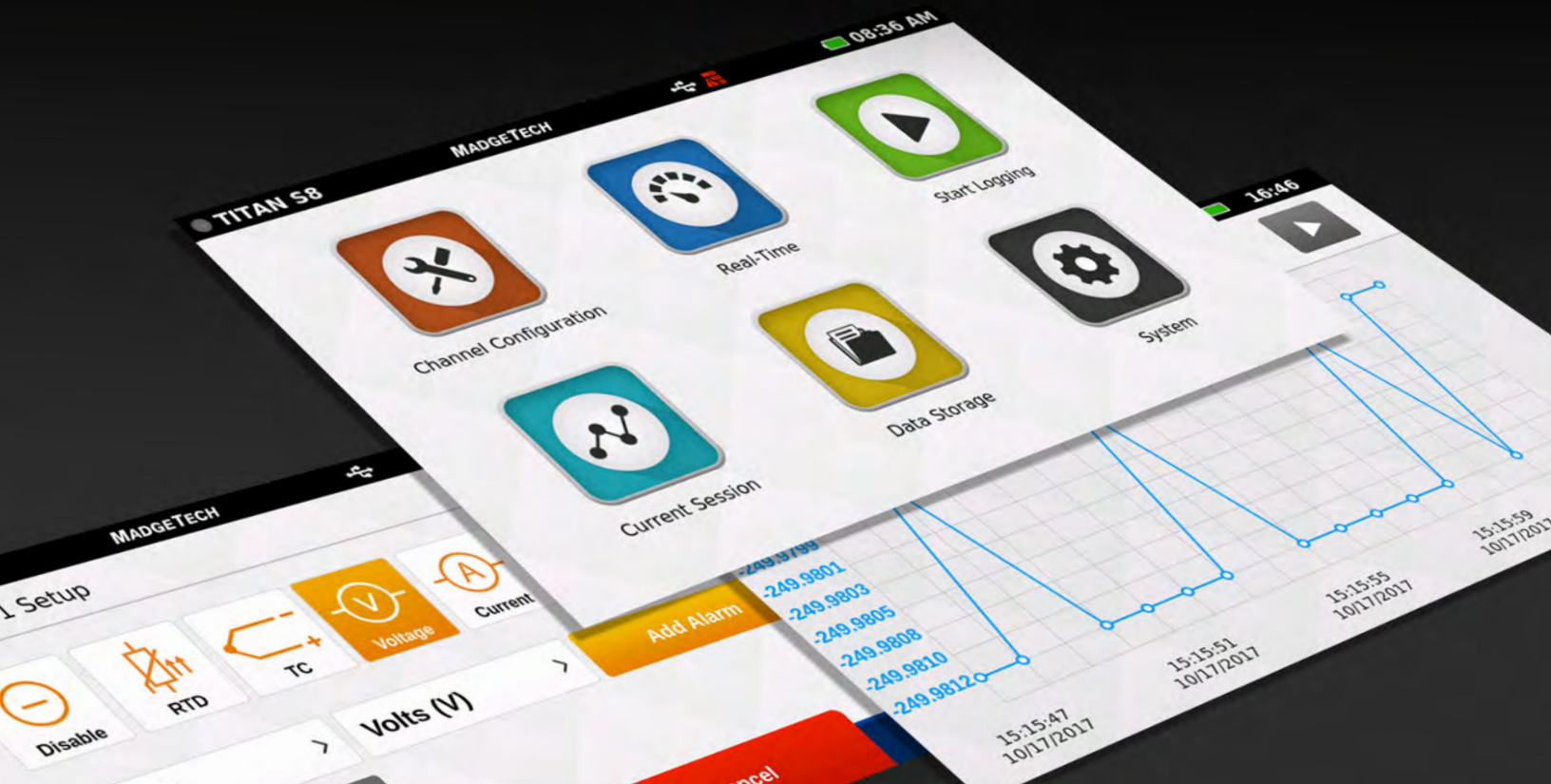
ON-SCREEN KEYBOARD



BUILT-IN TROUBLESHOOTING



LANGUAGE TRANSLATION



# SPECIFICATIONS

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

## GENERAL

Number of Channels.....	8	Dimensions.....	6.65 in x 4.40 in x 1.41 in (168.9 mm x 111.8 mm x 35.8 mm)
Memory .....	1,000,000 readings, 1 GB..	Enclosure Material..	Polycarbonate, TPE Protective Boot
Operating Environment ..	0 °C to 50 °C (32 °F to +122 °F) 0 %RH to 95 %RH non-condensing	Weight.....	1.3 lbs (20.8 oz)
Battery Type.....	Rechargeable 3.7 V Lithium Ion Battery Pack	IP Rating.....	IP20
Battery Life.....	Continuous On-Screen Sampling: 9 hours Stand-by Mode: 100 hours		

### 0-24 MA

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

### FREQUENCY / PULSE

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

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

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

### 0-100 MV

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

### TEMPERATURE NTC-1 (2252)

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

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

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

### 0-10 V

Maximum Voltage	25 V
Resolution.....	0.001 V
Accuracy.....	± 0.01 V
Input Impedance .....	1 GΩ

### TEMPERATURE NTC-2 (10K)

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