



Data Sheet

UT3300+ Series Multi-Channel Data Loggers

V1.0

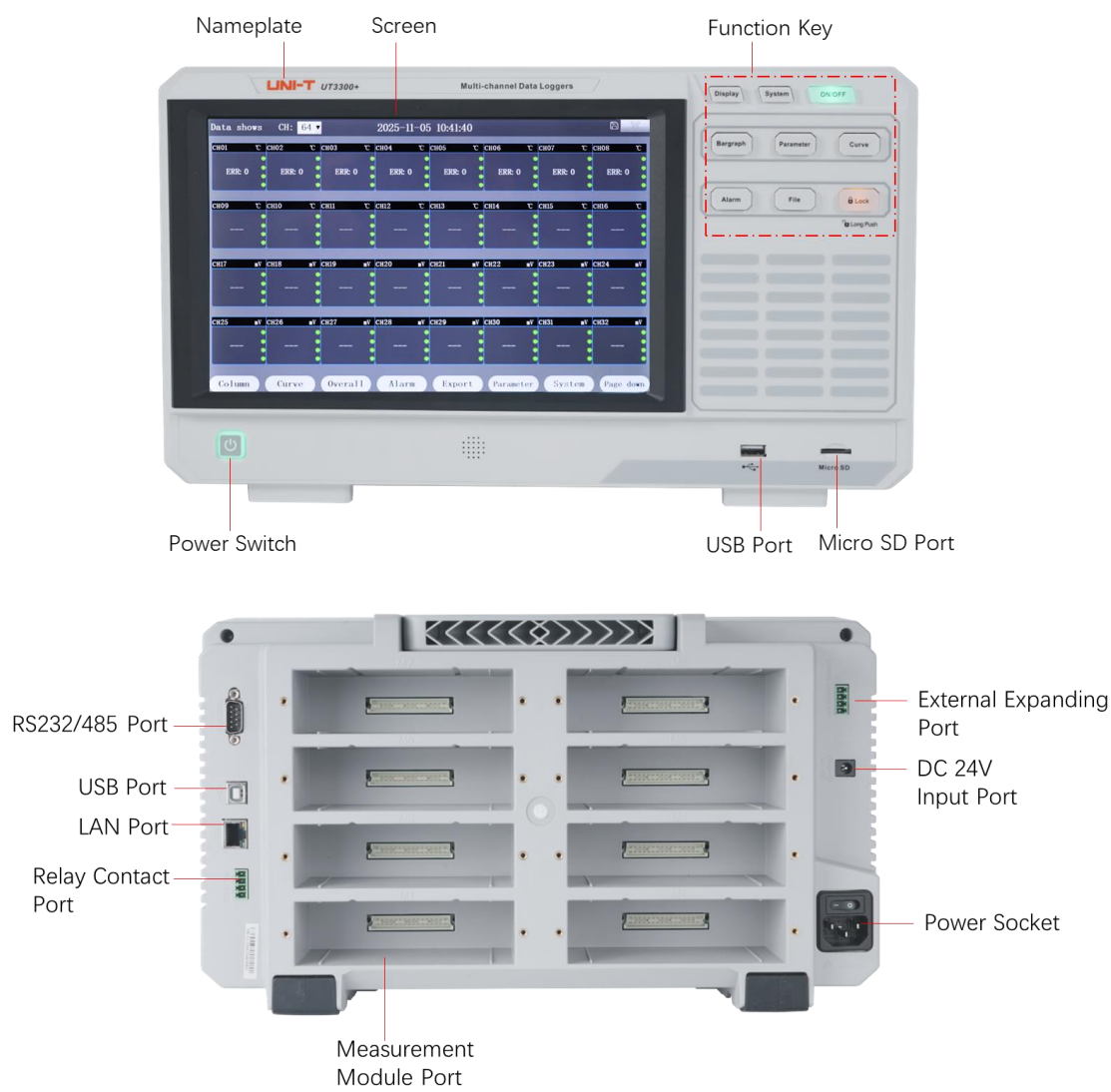
July 2026

1. Product Overview

UT3300+ Series Multi-channel Data Loggers is a high-precision, highly stable, multi-channel scanning data acquisition system featuring a 10.1-inch full-color touchscreen display and supporting up to 64 channels in a single unit. With fully isolated universal inputs, it accommodates a wide range of signal acquisitions, such as thermocouples, platinum resistance thermometers, voltage, and current. It boasts a maximum sampling rate of 1 sample per second and includes 8GB of built-in memory. The system supports both AC (85–265V) and DC (24V) power supply methods. It is equipped with versatile interfaces, including RS232/485, USB DEVICE, LAN, USB HOST, and an SD card slot. Whether for research and development testing or production automation, it offers comprehensive testing and measurement solutions.

Measurement Applications

UT3300+ Series Multi-Channel Data Loggers are used in power and electrical, biopharmaceutical, electronic testing, new energy, transportation, meteorology, environmental protection, agriculture, and other industrial sectors.



2. Design Highlights

10.1-inch High-Resolution Display



Column Chart Display

Data is displayed proportionally as column, with 100% at the top and 0% at the bottom. The 8 channels of each module are grouped together and displayed simultaneously on the screen.

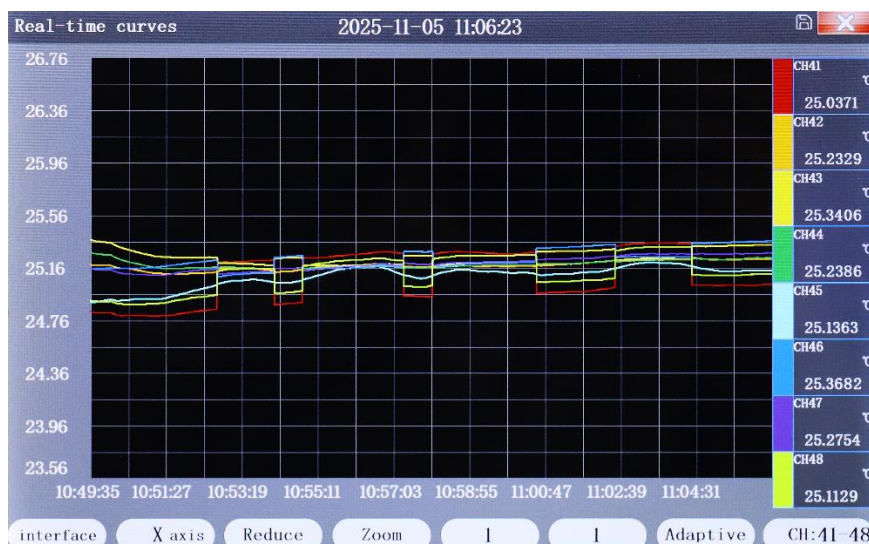
$$\text{Top Percentage} = \frac{\text{Measured Value} - \text{Range Lower Limit}}{\text{Range Upper Limit} - \text{Range Lower Limit}} \times 100\%$$



Curves Display

This page shows the trend of 8 channels' data from the same module, with the real-time acquired data displayed on the right, along with the color assigned to each channel in the curves chart. The X-axis represents time, and the Y-axis represents the acquired data.

Tap the Curves Operation button to perform related actions on the curves, such as zoom in, zoom out, modifying the axis, and switching channels.



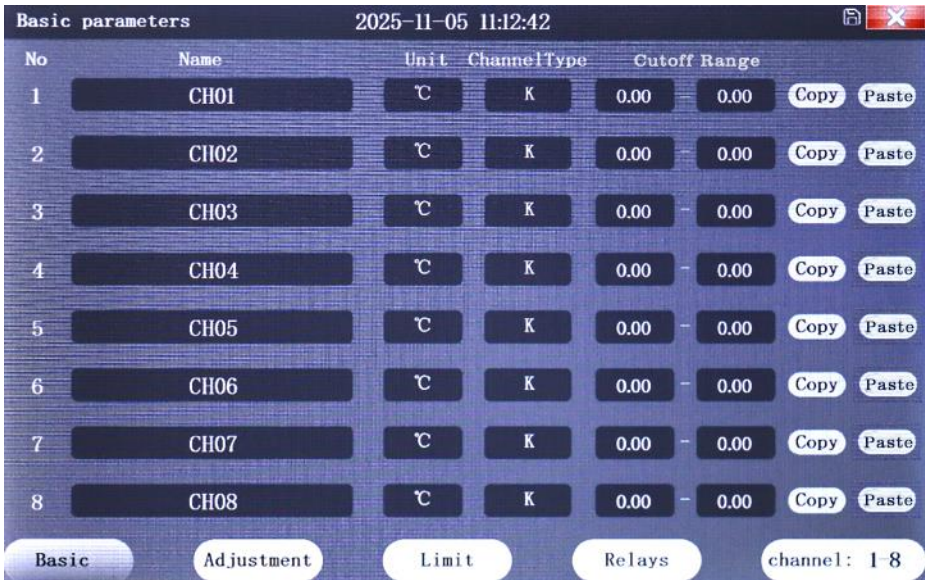
Overall Display Page

This page combines the content of the Data Display, Column Chart Display, and Trend Curve pages: the upper-left corner shows the real-time reading and alarm status, the upper-right corner shows the column chart, and the lower-center area shows the trend curve. Tap the curve operation buttons to control the curve — for example, to zoom in, zoom out, or switch channels.



Multiple Measurement Modes

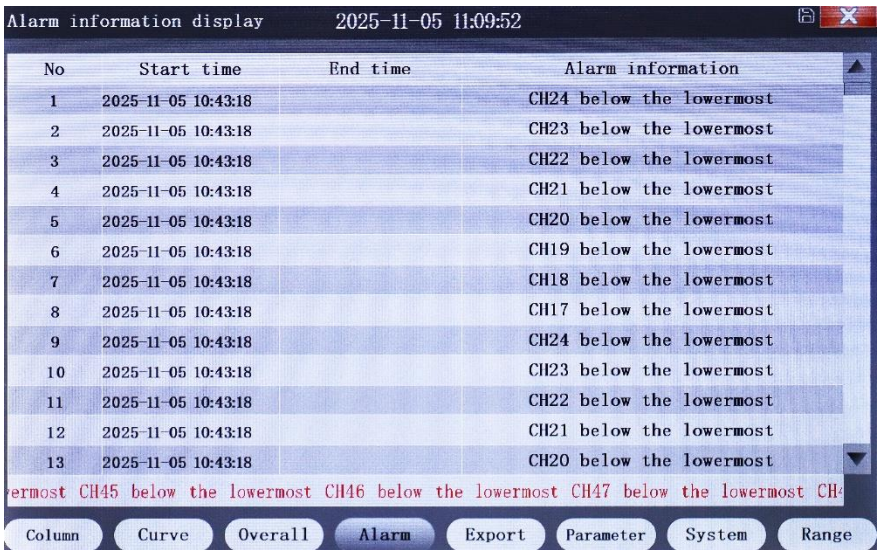
Powerful measurement capabilities with simultaneous support for multiple input signal types – thermocouples, platinum resistance thermometers, DC voltage, and DC current.



Alarm Information Display

Alarm information displays the start time and end time of each alarm event when a channel goes out of the configured range. The scrolling red text at the bottom of the page shows real-time alarm information for channels currently in an alarm state.

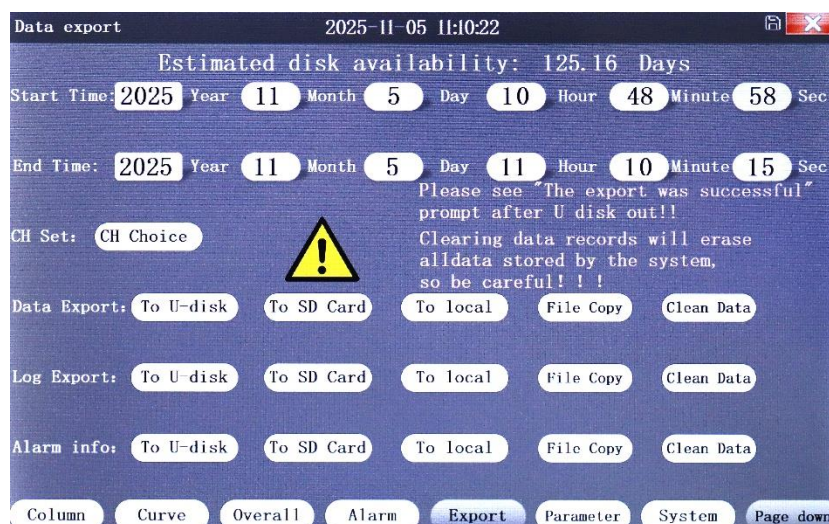
To browse recorded alarm information, tap the up or down arrow on the scroll bar on the right side of the page to scroll one entry at a time, or drag the scroll bar to browse quickly.



Data Export

To export data stored in the instrument, first specify the start time and end time. The instrument searches for data within the specified time range and exports it to the selected disk.

The Estimated Storage Time shown at the top of the page indicates the maximum duration for which the instrument can continuously acquire and store data, calculated based on the remaining free space on the drive.



Optional Modules

Optional modules	
DC Voltage Acquisition Module UT-M3300DCV	Measurement range: 0-120 V; Accuracy: 0.5%
DC Current Acquisition Module UT-M3300DCI	Measurement range: 0-10 A; Accuracy: 0.5%
Temperature and Humidity Acquisition Module UT-M3300TH	Accuracy of the dedicated temperature and humidity sensor: $\pm 0.5^{\circ}\text{C}$ for temperature, $\pm 3\% \text{RH}$ for humidity.
Digital Input Module UT-M3300SW	8-channel digital input signals, 5-24 V
NTC Temperature Sensor Acquisition Module UT-M3300NTC	Supports NTC sensors such as 3380, 3600, 3950, 3435, etc.
Relay Alarm Output Module UT-M3300RLY	8 channels of relay contact output (Form C, NO/NC), max. 250 V AC, 2 A

3. Technical Specifications

UT3300+ Specifications				
UT-M3300US Universal Signal Input Module (8 channels per module)				
No.	Input Type	Measurement Range	Measurement Accuracy	Digital Display Resolution
0	0 to 10 V	-0.5 V to 11.00 V	0.01%FS. ± 0.002 V	0.0001 V
1	0 to 5 V	-0.5 V to 5.50 V	0.01%FS. ± 0.002 V	0.0001 V
2	± 20 mV	-21.0 mV to 21.0 mV	0.005%FS. ± 0.005 mV	0.0001 mV
3	± 100 mV	-110.0 mV to 110.0 mV	0.005%FS. ± 0.005 mV	0.0001 mV
4	0-20 mA	0.00 mA to 21.0 mA	0.01%FS. ± 0.001 mA	0.0001 mA
5	K	-200 °C to +1372 °C	$\pm(0.1\% \text{rdg.} + 1.0 \text{ } ^\circ\text{C})$	0.01 °C
6	J	0 °C to +1200 °C	$\pm(0.15\% \text{rdg.} + 1.0 \text{ } ^\circ\text{C})$	0.01 °C
		-200 °C to 0 °C	$\pm(0.1\% \text{rdg.} + 1.0 \text{ } ^\circ\text{C})$	
7	E	0 °C to +1000 °C	$\pm(0.15\% \text{rdg.} + 0.5 \text{ } ^\circ\text{C})$	0.01 °C
		-200 °C to 0 °C	$\pm(0.1\% \text{rdg.} + 1.0 \text{ } ^\circ\text{C})$	
8	T	-30 °C to +400 °C	$\pm(0.15\% \text{rdg.} + 0.5 \text{ } ^\circ\text{C})$	0.01 °C
		-200 °C to -30 °C	$\pm(0.1\% \text{rdg.} + 1 \text{ } ^\circ\text{C})$	
9	N	0 °C to +1300 °C	$\pm(0.3\% \text{rdg.} + 0.7 \text{ } ^\circ\text{C})$	0.01 °C
		-200 °C to 0 °C	$\pm(0.1\% \text{rdg.} + 1 \text{ } ^\circ\text{C})$	
10	R	+800 °C to +1768 °C	$\pm(0.05\% \text{rdg.} + 1.5 \text{ } ^\circ\text{C})$	0.01 °C
		+400 °C to +800 °C	$\pm(0.2\% \text{rdg.} + 2.0 \text{ } ^\circ\text{C})$	
11	S	+800 °C to +1768 °C	$\pm(0.05\% \text{rdg.} + 1.5 \text{ } ^\circ\text{C})$	0.01 °C
		+400 °C to +800 °C	$\pm(0.2\% \text{rdg.} + 2.0 \text{ } ^\circ\text{C})$	
12	B	+800 °C to +1820 °C	$\pm(0.05\% \text{rdg.} + 1.5 \text{ } ^\circ\text{C})$	0.01 °C
		+400 °C to +800 °C	$\pm(0.2\% \text{rdg.} + 2.0 \text{ } ^\circ\text{C})$	
13	C	+1500 °C to +2315 °C	$\pm(0.05\% \text{rdg.} + 1.5 \text{ } ^\circ\text{C})$	0.01 °C
		0 °C to +1500 °C	$\pm(0.05\% \text{rdg.} + 1.0 \text{ } ^\circ\text{C})$	
14	A	+1500 °C to +2500 °C	$\pm(0.05\% \text{rdg.} + 1.5 \text{ } ^\circ\text{C})$	0.01 °C

		0 °C to +1500 °C	$\pm(0.05\% \text{rdg.} +1.0 \text{ } ^\circ\text{C})$	
15	Pt100	-200 °C to +660 °C	$\pm(0.05\% \text{rdg.} +0.3 \text{ } ^\circ\text{C})$	0.01 °C
16	Pt1000	-200 °C to +300 °C	$\pm(0.05\% \text{rdg.} +0.3 \text{ } ^\circ\text{C})$	0.01 °C
17	Cu50	-50 °C to +150 °C	$\pm(0.05\% \text{rdg.} +0.3 \text{ } ^\circ\text{C})$	0.01 °C
Mainframe				
Display	10.1-inch TFT			
Touchscreen	Yes			
Alarm Type	Four-level high/low alarms per channel(HH, H, L, LL)			
Number of channels	1 to 64 channels			
Recording Interval	1-9999 s (user-defined)			
Recording Capacity	8 G (64 channels at 1 sample / cycle can record for approximately 360 days)			
Interface	RS232, RS485, LAN, USB DEVICE, USB HOST, SD CARD			
Warm-up Time	Above 60 minutes			
Communication	RS232, RS485, LAN, USB DEVICE			
Interfaces	Standard SCPI and Modbus (RTU) protocols			
Power Supply Voltage and Frequency	AC85-265 V 50 / 60 Hz or DC24 V $\pm 10\%$			
Power Consumption	Max.20 VA			
Temperature and Humidity Parameters	Temperature: 25 ± 3 °C, humidity: 55 $\pm 10\%$ RH			
Operating Temperature	0-40 °C 80%RH			

Storage Temperature	-20 to 60 °C
Operating Humidity	10 to 80%RH
Storage Humidity	10 to 80%RH
Operating Altitude	≤2000 m
Enclosure Material	Flame-retardant ABS
Dimensions	378*220*153
Standard Accessories	K-type thermocouples, 8 pcs (2m each) per universal signal input module, temperature range: 0-200°C RS-232 communication cable 8 GB USB flash drive USB communication cable
Optional modules (8 channels per module)	
DC Voltage Acquisition Module UT-M3300DCV	Measurement range: 0-120 V; Accuracy: 0.5%
DC Current Acquisition Module UT-M3300DCI	Measurement range: 0-10 A; Accuracy: 0.5%
Temperature and Humidity Acquisition Module UT-M3300TH	Accuracy of the dedicated temperature and humidity sensor: ±0.5 °C for temperature, ±3 %RH for humidity. Temperature Range: -20°C -80°C Humidity Range: 0%RH-100%RH (For use only with the UT-L3300TH digital temperature and humidity sensor)

Digital Input Module UT-M3300SW	8-channel digital input signals, 5-24 V
NTC Temperature Sensor Acquisition Module UT-M3300NTC	Supports NTC sensors such as 3380, 3600, 3950, 3435, etc. Temperature Range: -40°C-125°C
Relay Alarm Output Module UT-M3300RLY	8 channels of relay contact output (Form C, NO/NC), max. 250 V AC, 2 A

4. Accessories

Item	Quantity	Notes
Multi-Channel Data Logger Mainframe	1 pc	
Power Cord	1 pc	
RS-232 Communication Cable	1 pc	
USB Communication Cable	1 pc	
Universal Module	Varies by model	UT3300-08+: 1 UT3300-16+: 2 UT3300-24+: 3 UT3300-32+: 4 UT3300-40+: 5 UT3300-48+: 6 UT3300-56+: 7 UT3300-64+: 8
K-type Thermocouple	Varies by model	UT3300-08+: 1 set UT3300-16+: 2 sets UT3300-24+: 3 sets UT3300-32+: 4 sets UT3300-40+: 5 sets UT3300-48+: 6 sets UT3300-56+: 7 sets UT3300-64+: 8 sets
Quick Start Guide	1 pc	
User Manual	0 pc	Digital version available for download from the official website

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Headquarter

UNI-TREND TECHNOLOGY (CHINA)
CO., Ltd.

Address: No.6, Industrial North 1st
Road, Songshan Lake Park,
Dongguan City, Guangdong
Province, China

Europe

UNI-TREND TECHNOLOGY EU
GmbH

Address: Affinger Str. 12
86167 Augsburg Germany
Tel: +49 (0) 821 8879980

North America

UNI-TREND TECHNOLOGY
US INC.

Address: 3171 Mercer Ave
STE 104, Bellingham, WA
98225
Tel: +1-888-668-8648