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Data Sheet

UT3300+ Series Multi-Channel Data Loggers

V1.1

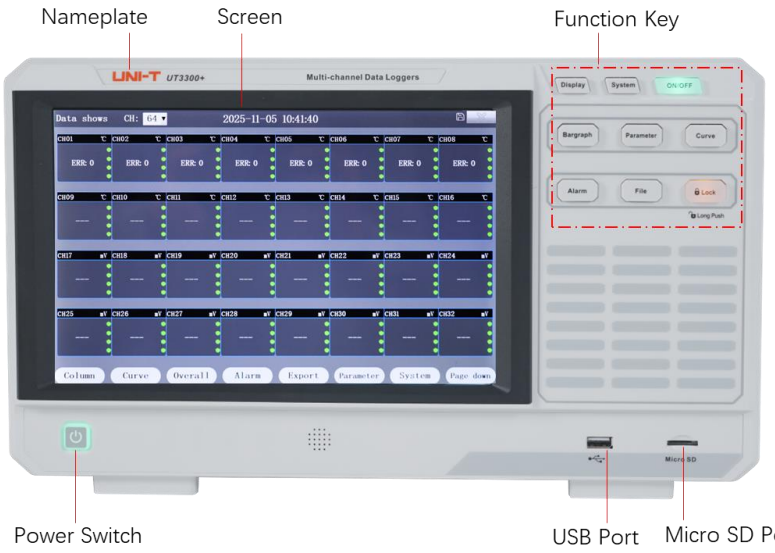
October 2026

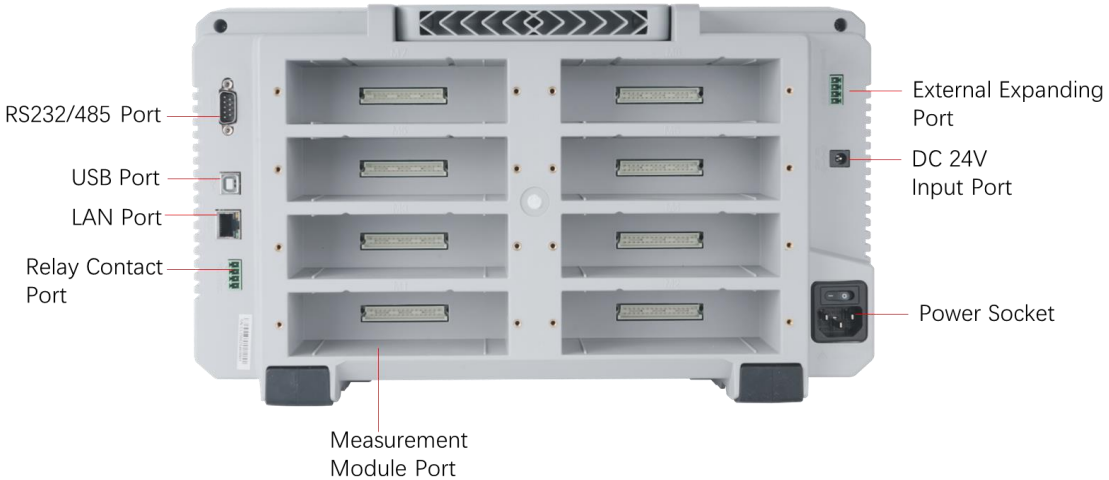
1. Product Overview

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

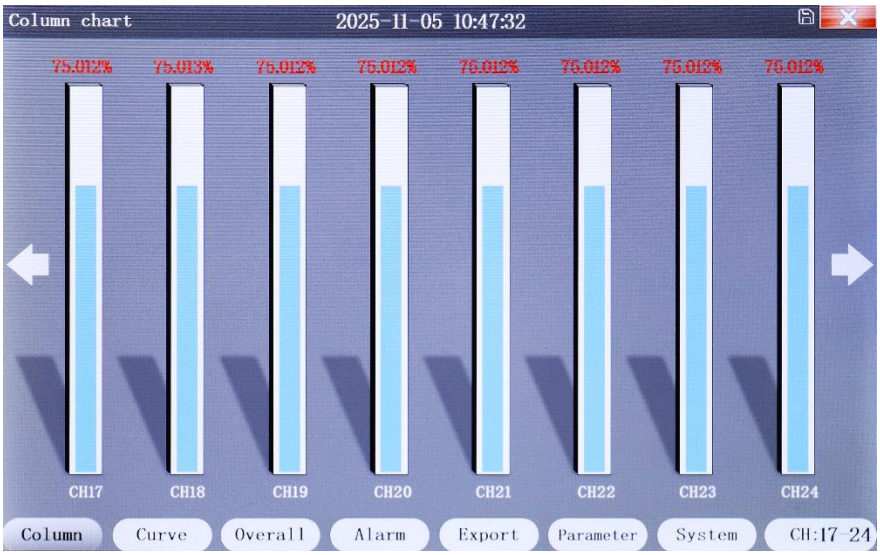
10.1-inch High-Resolution Display



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.

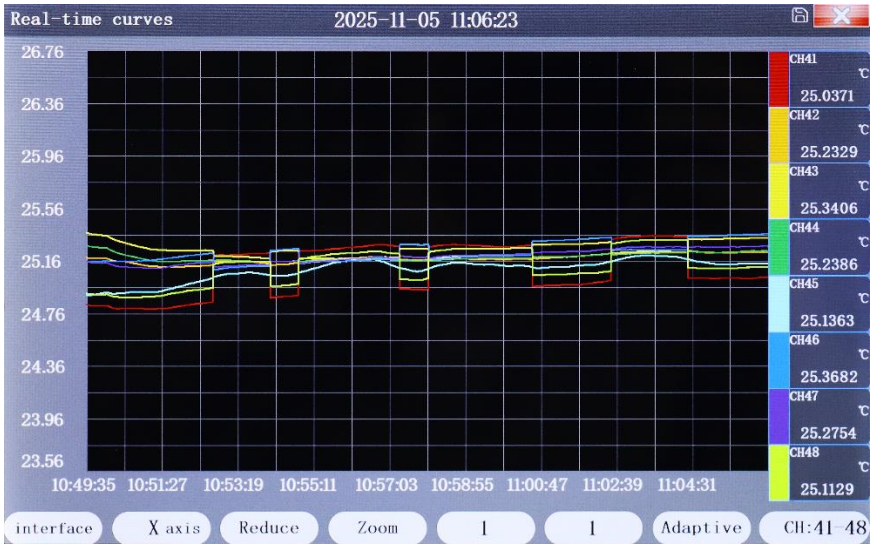
$$\text{Top Percentage} = \frac{\text{Measured Value} - \text{Raneg Lower Limit}}{\text{Ranger Upper Limit} - \text{Range Lower Limit}} \times 100\%$$



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.



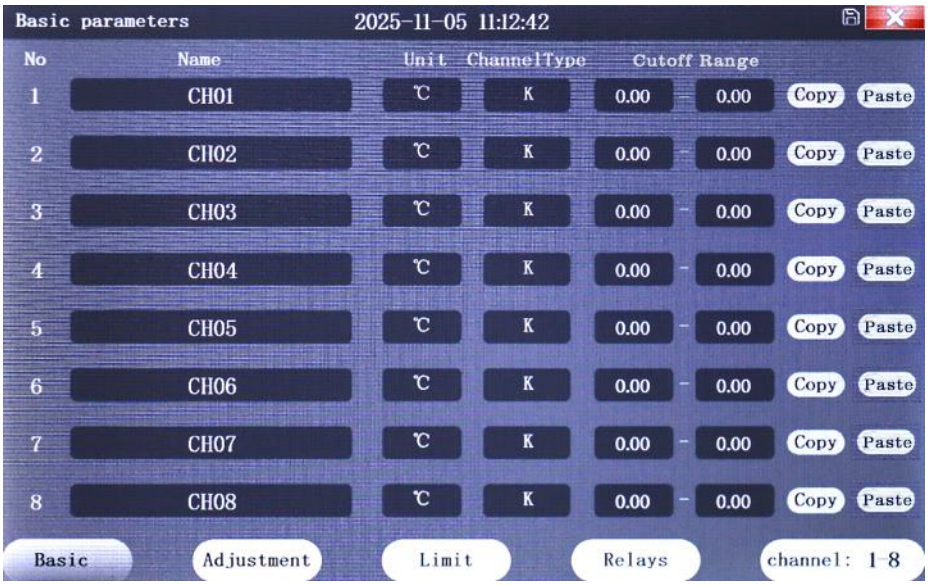
Overall Display Page

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 columncolumn 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

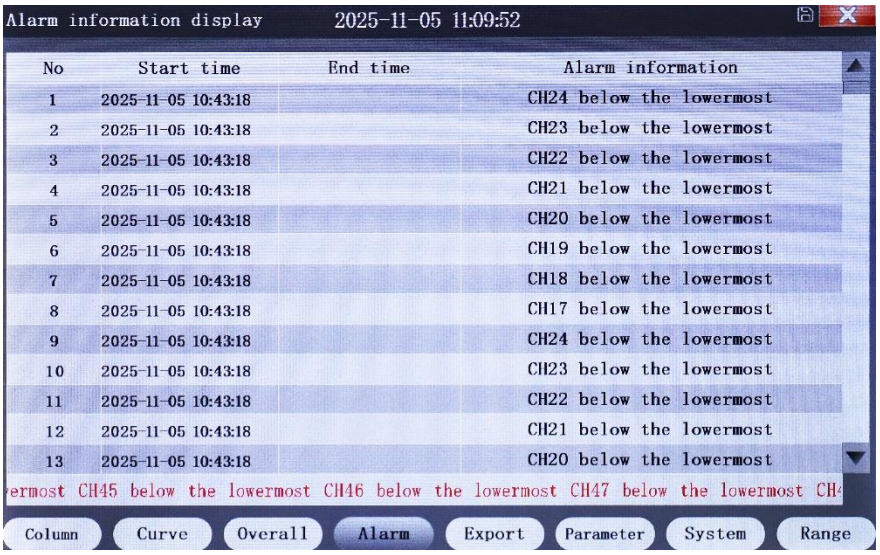
Powerful measurement capabilities with simultaneous support for multiple input signal types — thermocouples, platinum resistance thermometers, DC voltage, and DC current.



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.

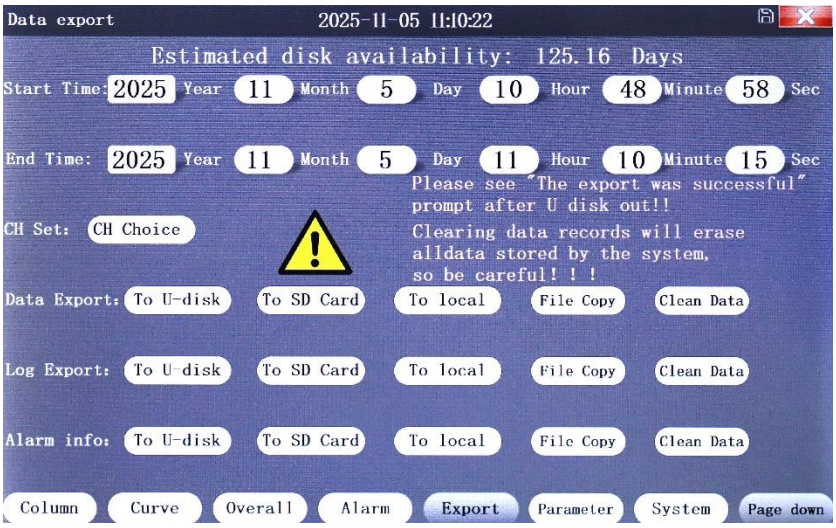
To browse recorded alarm information, tap the up or down arrow on the scroll bar on the right side of the page to scroll one entry at a time, or drag the scroll bar to browse quickly.



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.



3. Technical Specifications

UT3300+ Specifications									
Model	UT3300+	UT3300-08+	UT3300-16+	UT3300-24+	UT3300-32+	UT3300-40+	UT3300-48+	UT3300-56+	UT3300-64+
Channel	-	8	16	24	32	40	48	56	64
Weigh	3.35 kg	3.5 kg	3.65 kg	3.8 kg	3.95 kg	4.1 kg	4.25 kg	4.4kg	4.55 kg
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 Interfaces	RS232, RS485, LAN, USB DEVICE								
	Standard SCPI and Modbus (RTU) protocols								
Power Supply Voltage and Frequency	AC85-265V 50 / 60 Hz or DC24 V±10%								
Power Consumption	Max.25 VA								
Temperature and Humidity Parameters	Temperature: 25±3 °C, humidity: 55±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
	RS-232 communication cable
	8 GB USB flash drive
	USB communication cable

UT-M3300US Universal Signal Input Module (8 channels per module)

No.	Input Type	Measurement Range	Measurement Accuracy	Temperature Coefficient/℃	Digital Display Resolution
0	0 to10 V	-0.5 V to 11.00 V	0.01%FS. ±0.002 V	0.001%FS. ±0.0002V	0.0001 V
1	0 to 5 V	-0.5 V to 5.50 V	0.01%FS. ±0.002 V	0.001%FS. ±0.0002V	0.0001 V
2	±20 mV	-21.0 mV to 21.0 mV	0.005%FS. ±0.005 mV	0.0005%FS. ±0.0005mV	0.0001 mV
3	±100 mV	-110.0 mV to 110.0 mV	0.005%FS. ±0.005 mV	0.0005%FS. ±0.0005mV	0.0001 mV
4	0-20 mA	0.00 mA to 21.0 mA	0.01%FS. ±0.001 mA	0.001%FS. ±0.0001mA	0.0001 mA
5	K	-200 °C to +1372 °C	±(0.1%rdg. +1.0 °C)	±(0.01%rdg. +0.1℃)	0.01 °C
6	J	0 ℃ to +1200 °C	±(0.15%rdg. +1.0 °C)	±(0.015%rdg. +0.1℃)	0.01 °C
		-200 ℃ to 0 °C	±(0.1%rdg. +1.0 °C	±(0.01%rdg. +0.1℃)	
7	E	0 ℃ to +1000 °C	±(0.15%rdg. +0.5 °C)	±(0.015%rdg. +0.05℃)	0.01 °C
		-200 ℃ to 0 °C	±(0.1%rdg. +1.0 °C	±(0.01%rdg. +0.1℃)	
8	T	-30 ℃ to +400 °C	±(0.15%rdg. +0.5 °C)	±(0.015%rdg. +0.05℃)	0.01 °C
		-200 ℃ to -30 °C	±(0.1%rdg. +1 °C	±(0.01%rdg. +0.1℃)	
9	N	0 ℃ to +1300 °C	±(0.3%rdg. +0.7 °C)	±(0.03%rdg. +0.07℃)	0.01 °C
		-200 ℃ to 0 °C	±(0.1%rdg. +1 °C)	±(0.01%rdg. +0.1℃)	
10	R	+800 ℃ to +1768 °C	±(0.05%rdg. +1.5 °C)	±(0.005%rdg. +0.15℃)	0.01 °C
		+400 ℃ to +800 °C	±(0.2%rdg. +2.0 °C)	±(0.02%rdg. +0.2℃)	
11	S	+800 ℃ to +1768 °C	±(0.05%rdg. +1.5 °C)	±(0.005%rdg. +0.15℃)	0.01 °C
		+400 ℃ to +800 °C	±(0.2%rdg. +2.0 °C)	±(0.02%rdg. +0.2℃)	
12	B	+800 ℃ to +1820 °C	±(0.05%rdg. +1.5 °C)	±(0.005%rdg. +0.15℃)	0.01 °C

		+400 ℃ to +800 °C	±(0.2%rdg. +2.0 °C)	±(0.02%rdg. +0.2℃)	
13	C	+1500 ℃ to +2315 °C	±(0.05%rdg. +1.5 °C)	±(0.005%rdg. +0.15℃)	0.01 °C
		0 ℃ to +1500 °C	±(0.05%rdg. +1.0 °C)	±(0.005%rdg. +0.1℃)	
14	A	+1500 ℃ to +2500 °C	±(0.05%rdg. +1.5 °C)	±(0.005%rdg. +0.15℃)	0.01 °C
		0 ℃ to +1500 °C	±(0.05%rdg. +1.0 °C)	±(0.005%rdg. +0.1℃)	
15	Pt100	-200 ℃ to +660 °C	±(0.05%rdg. +0.3 °C)	±(0.005%rdg. +0.05℃)	0.01 °C
16	Pt1000	-200 ℃ to +300 °C	±(0.05%rdg. +0.3 °C)	±(0.005%rdg. +0.05℃)	0.01 °C
17	Cu50	-50 ℃ to +150 °C	±(0.05%rdg. +0.3 °C)	±(0.005%rdg. +0.05℃)	0.01 °C

Optional modules (8 channels per module)	
Universal Signal Input Module UT-M3300US	Specifications identical to the standard module
DC Voltage Acquisition Module UT-M3300DCV	Range: 0.1V - 120V; Accuracy:0.5%rdg.; Resolution：0.1mV
DC Current Acquisition Module UT-M3300DCI	Range: 0.1A - 10A; Accuracy:0.5%rdg+3 digit; Resolution：0.1mA Temperature Coefficient±0.05rdg.+0.3 digit/℃
Temperature and Humidity Acquisition Module UT-M3300TH	Dedicated temperature & humidity sensor Accuracy: Temperature ±0.5°C, Humidity ±3%RH; Resolution: 0.1°C Temperature range: -20°C to 80°C Humidity range: 10%RH to 90%RH (Can only be used with the UT-L3300TH digital temperature & humidity sensor; one module supports up to 8 sensors)
Digital Input Module UT-M3300SW	8-channel digital signal input, 5-24V
NTC Temperature Sensor Acquisition Module UT-M3300NTC	Supports NTC sensors such as 3380, 3600, 3950, 3435, etc. Temperature range: -40°C to 125°C Accuracy: 0.05% rdg + 0.3°C, Resolution: 0.1°C

Relay Alarm Output Module UT-M3300RLY	8-channel normally-open/normally-closed relay contact output, overload 250V 2A
Optional Parts（Every sensor 1 channel）	
Temperature and Humidity Sensor UT-L3300TH	Accuracy: Temperature ±0.5℃, Humidity ±3%RH; Resolution: 0.1℃

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

Limited Warranty and Liability

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