

## Model:UT-6816/UT-6832 Series

(Product Name: 10/100M/1000m to 16/32 Ports RS-232/485/422 Serial Device  
Server )

# Datasheet



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## 1. Overview

UT-6816/UT-6832 serial device server provides a serial to network function that converts RS-232/485/422 serial ports into TCP/IP network interfaces, enabling transparent bi-directional data transmission between RS-232/485/422 serial ports and TCP/IP network interfaces. Enables serial devices to immediately have TCP/IP network interface functionality.

## 2. Major Functions & Features

- With metal housing and multiple installation design.
- Adopt AC100~240V/50/60Hz voltage for power supply, optional redundant dual power supply to ensure reliable operation of the product.
- The machine has a built-in watchdog power supply, in the case of abnormal equipment, the equipment will be automatically restarted without human intervention, so that the equipment can run reliably.
- Device with 16 or 32 serial ports supports RS232\RS485\RS422 that can be switched by soft.
- Support a wide baud rate range of 300-921600bps, suitable for applications between different devices.
- Support multiple operation modes: VCOM, MCP, TCP SERVER, TCP CLIENT, UDP, Remote Pair mode, Modbus TCP SERVER, Modbus TCP CLIENT, MQTT, SNMP, Telnet.
- The device has a built-in (reserved) miniPCIE slot (1 USB2.0 PCIe 1.1)
- Support software secondary development, convenient for special applications in different occasions.
- Support upgrade Web firmware upgrade, convenient for special applications in different occasions.

## 3. Technical Parameters

	UT-6816	UT-6832
CPU	Main frequency up to 880MHZ	Main frequency up to 880MHZ
RAM	256M	256M
Ethernet interface	(Default) 2 10/100/1000M (built-in 1.5KV electromagnetic isolation) adaptive MDI/MDI-X Ethernet interface, interface mode RJ45. Optional 1 optical + 1 electrical	(Default) 2 10/100/1000M (built-in 1.5KV electromagnetic isolation) adaptive MDI/MDI-X Ethernet interface, interface mode RJ45. Optional 1 optical + 1 electrical
Serial standard	RS-232. RS-485. RS-422	RS-232. RS-485. RS-422
Serial port	16 × RJ45	32 × RJ45
Indicator light	Power indicator PWR1, PWR2, running indicator RUN, link1, Act1, link2, Act2 and 16 data transceiver two-color serial port indicators.	Power indicator PWR1, PWR2, running indicator RUN, link1, Act1, link2, Act2 and 32 data transceiver two-color serial port indicators.
Power range	DC100~240V/50/60Hz	DC100~240V/50/60Hz
Function buttons	1 Factory reset button RESET	1 Factory reset button RESET
Max. Power consumption	7W	10W
Housing	Metal housing, with IP30 protection level	Metal housing, with IP30 protection level
Operating environment	Storage temperature: -40~85° C Operating temperature: -25~70° C Relative humidity: 5% ~95% (non-condensing)	Storage temperature: -40~85° C Operating temperature: -25~70° C Relative humidity: 5% ~95% (non-condensing)

Dimensions L×W×H	440mm×230mm×44mm (without mounting parts)	440mm×230mm×44mm (without mounting parts)
Net. Weight	2400g	2833g

#### 4. Software Parameters

Operating system	Based on linux
Protocol support	ARP. IP. ICMP. UDP. TCP. HTTP. DHCP. SNMP. MQTT. MODBUS. Telnet
Configuration method	Web browser, VCOM Utility(virtual COM only Windows)
Operating Mode	VCOM,MCP,TCP SERVER, TCP CLIENT,UDP,Remote Pair mode,Modbus TCP SERVER,Modbus TCP CLIENT,MQTT,Reverse Telnet,SNMP
Baud rate	300-921600bps
Data Bits	5. 6. 7. 8
Stop Bits	1. 2
Check Bits	None. Odd. Even
Flow Control	RTS/CTS. DTR/DSR. XON/XOFF (only RS-232)

#### 5. Certification Standards

EMC	55032/24
EMI	Class A
EMS	IEC61000-4-2 ESD: Contact 6kV, Air 8kV IEC61000-4-3 RS: 80MHz-1GHz 3V/m IEC61000-4-4 EFT: Power 1kV, Signal0.5kV IEC61000-4-5 Surge: Power differential mode 1KV, common mode 2KV (8/20) Ethernet ports differential mode 1KV, common mode 2KV (10/700 us) RS-232/485/422 differential mode 1KV, common mode 2KV (10/700 us) IEC61000-4-6 CS: 150KHz-80MHz 3V/m

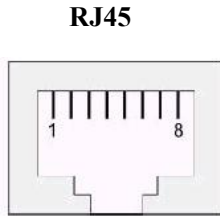
#### 6. Indicator definition

Name	Color	Function	Status
PWR	Green	Power Indicator	On
RUN	Green	System running indicator	1S on, 1S off flash alternately
Link1	Green	Ethernet port 1 link indicator	Long light on Link
Act1	Green	Ethernet port 1 data transceiver indicator	Data flashing
Link2	Green	Ethernet port 2 link indicator	Long light on link
Act2	Green	Ethernet port 2 data transceiver indicator	Data flashing
DATA1- DATA32	Green	Serial data sending indicator	with data, flashing; no data, off
DATA1- DATA32	Yellow	Serial data receiving indicator	with data, flashing; no data, off

Note: Serial port data is yellow and green two-color light, when sending data, green light flashes; when receiving data. yellow light flashes.

## 7. Interface definitions

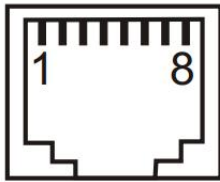
### 1. Console port definition:



RJ45	Console
1	-
2	-
3	TXD
4	GND
5	GND
6	RXD
7	-
8	-

### 2. Ethernet RJ45 interface definition

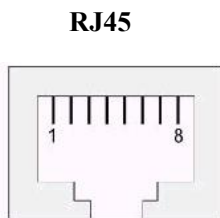
1000Base-T (X) pin definitions are shown in the following table:



Pin No.	MDI signal	MDI-X signal
1	BI_DA+/TX+	BI_DB+/RX+
2	BI_DA+/TX-	BI_DB+/RX-
3	BI_DB+/RX+	BI_DA+/TX+
4	BI_DC+/-	BI_DD+/-
5	BI_DC-/-	BI_DD-/-
6	BI_DB-/RX-	BI_DA-/TX-
7	BI_DD+/-	BI_DC+/-
8	BI_DD-/-	BI_DC-/-

Note: "TX ±" means transmit data ±, "RX ±" means receive data ±, and "-" means unused. When 10Base-T/100Base-T (X), 4, 5, 7, and 8 are none.

### 3. Serial port RJ45 pin definition:



RJ45	RS-232	RS-485	RS-422
1	TxD	DATA+	TxD+
2	RxD	DATA-	TxD-
3	RTS		RxD+
4	CTS		RxD-
5	DSR		
6	GND	GND	GND
7	DTR		
8	DCD		

## 6. Appearance



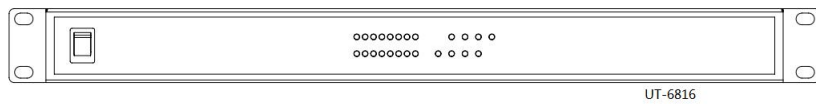
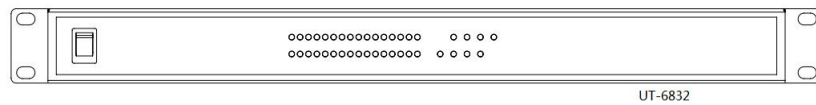
UT-6816-E

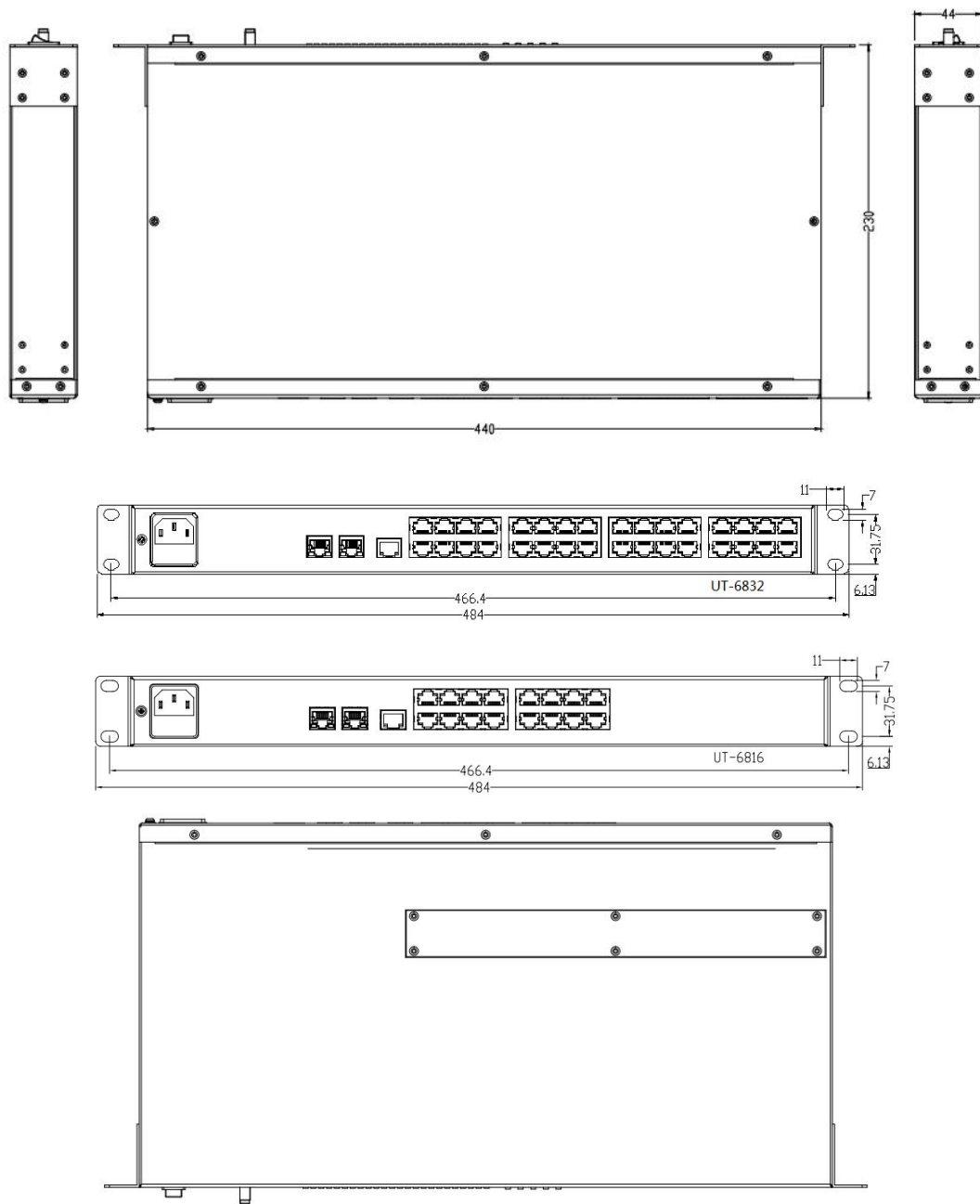


UT-6832-E

## 7. Structure dimensions

Dimensions: length  $440 \pm 0.5\text{mm}$ , width  $230 \pm 0.5\text{mm}$ , height  $44\text{mm} \pm 0.5\text{mm}$





## 8. Accessories

Name	QTY(unit)
Device	1PC
Certificate	1PC
Warranty	1PC
Power cable	1PC
Fixed piece	2PCS

## 8. Ordering

Model	Power supply	Serial interface mode	Communication mode	Signal output	Display	Ethernet
UT-6816-E	Single power AC100~240V/5 0Hz/60Hz	RJ45	RS-232 RS-485 RS-422	Non-isolated	Indicator panel	2 gigabit electrical ports
UT-6816-F	Single power AC100~240V/5 0Hz/60Hz	RJ45	RS-232 RS-485 RS422	Non-isolated	Indicator panel	1 gigabit electrical port /1 SFP optical port
UT-6832-E	Single power AC100~240V/5 0Hz/60Hz	RJ45	RS-232 RS-485 RS-422	Non-isolated	Indicator panel	2 gigabit electrical ports
UT-6832-F	Single power AC100~240V/5 0Hz/60Hz	RJ45	RS-232 RS-485 RS-422	Non-isolated	Indicator panel	1 gigabit electrical port /1 SFP optical port