



W232N Datasheet-[EN]

Overview

This document is the HW specification for the W232N, an industrial Ethernet to RS232 data conversion device.



Features

- RS232 to Ethernet protocol conversion device
- Support multiple protocols
 - TCP Server
 - TCP Client
 - SSL TCP Client
 - TCP Mixed
 - Modbus RTU/ASCII (available only in TCP Server mode)
 - UDP



Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

- MQTT Client
- MQTTS Client
- Support custom protocols (Please submit custom protocol requests via [this link](#).)
 - HTTP
 - HTTPS
 - CoAP
 - External device OTA
- Enables easy implementation of Ethernet into existing serial devices
- KC,FCC certified to ensure high system stability and reliability
- Supports 10/100Mbps Ethernet and up to 230kbps serial speeds
- Supports RS232C standard with D-SUB9 port
- Supports password setting for device discovery
- Supports AT command via D-SUB9 port
- Configurable with Config-tool
- Supports Web Config
- Wide input voltage 5~36V
- Industrial-standard operating temperature -25~80°C
- Supports DIN rail (DIN 46277) mounting
- Protected against ESD

What's inside

The package of W232N is organized as follows.

- W232N

Appearance

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊



W232N Revision 1.0 Front



W232N Revision 1.0 Back

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊



Dimension

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊



- 78 x 52 x 28 (mm)

Pin map, Switch

DB9M Connector

A diagram of a DB9M connector showing the pin layout. The pins are numbered 1 through 9, with 1 and 5 at the top, 6 and 9 at the bottom, and 2, 3, 4, and 8 in the middle. The connector is shown in a perspective view.

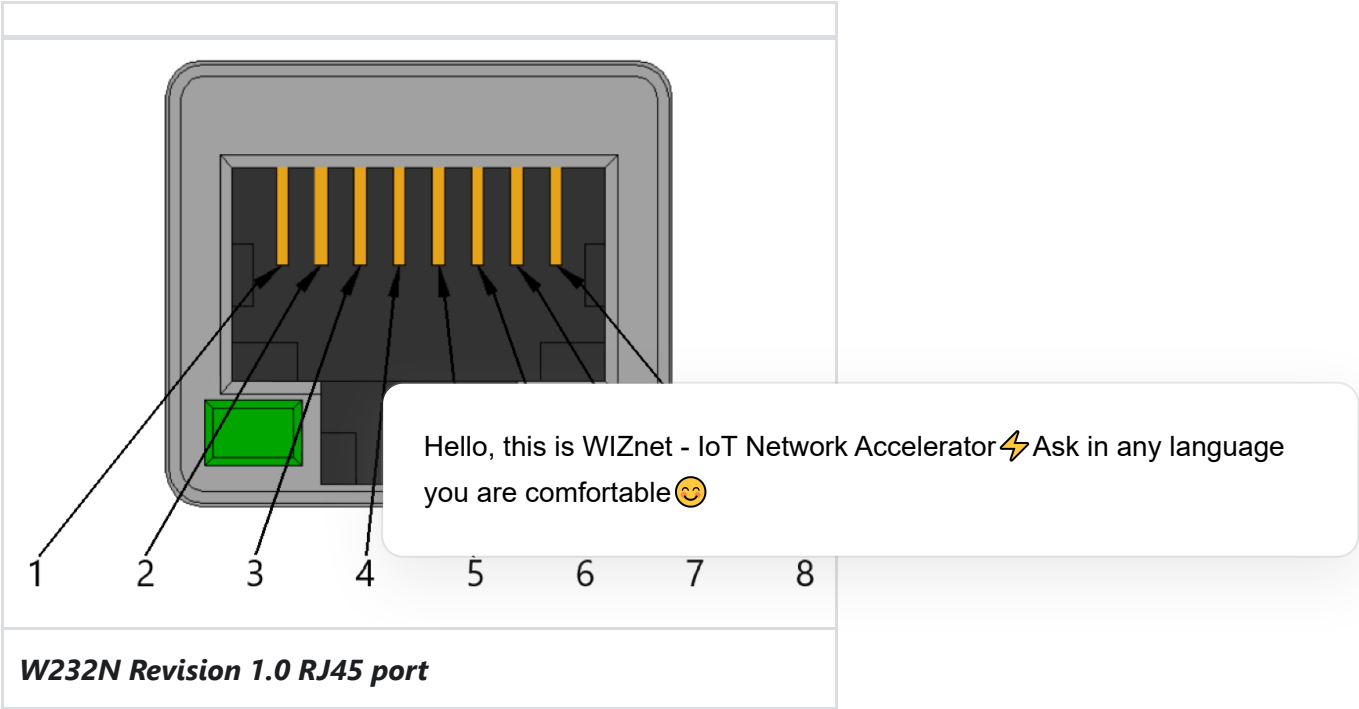
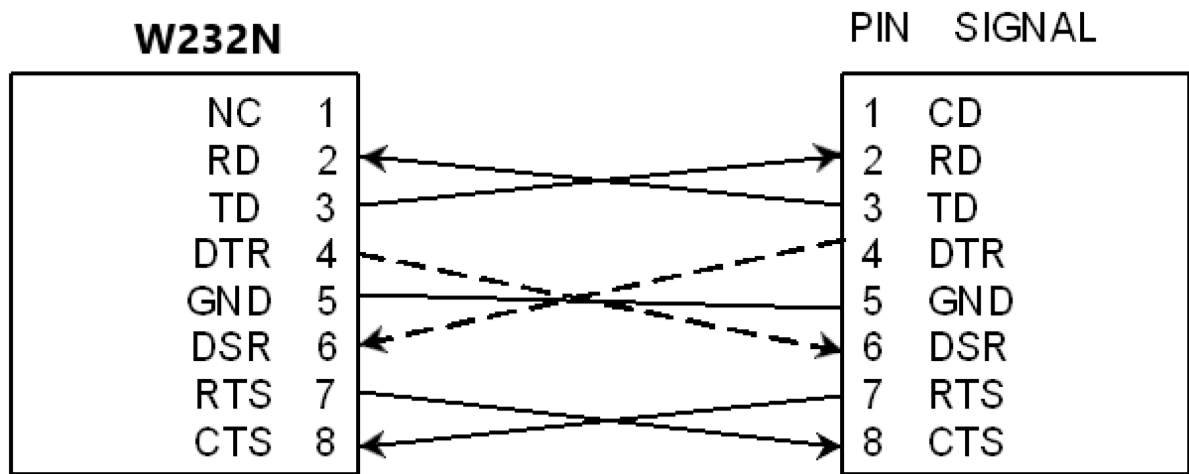
RS-232 Pinout

Pin#	Signal
1	NC
2	RX
3	TX
4	DTR
5	GND
6	DSR
7	NC
8	RTS
9	NC

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

W232N Revision 1.0 DB9M port

Pin Number	Signal	Description
1	DCD	NC
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	System Ground(Signal Ground)
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	NC



Pin Number	Signal	Description
1	TXP	TX+
2	TXN	TX-
3	RXP	RX+
4	NC	PoE+ or PoE-
5	NC	PoE+ or PoE-
6	RXN	RX-
7	NC	PoE- or PoE+
8	NC	PoE- or PoE+

- PoE is only available on models that support it.
- When using PoE, the polarity of pins 4,5 and 7,8 must be different.
 - If pin 4,5 is +, then pin 7,8 is -, or if pin 4,5 is -, then pin 7,8 is +.



- HW Reset switch

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

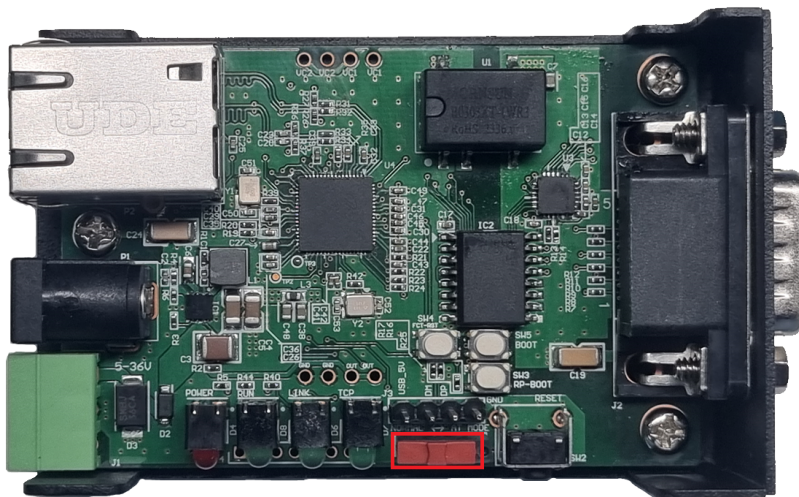
Ports and switches inside the case

- The top case can be removed by removing the bolts (M3) on each side of the W232N.



W232N Case bolts

AT MODE SW



AT Mode SW

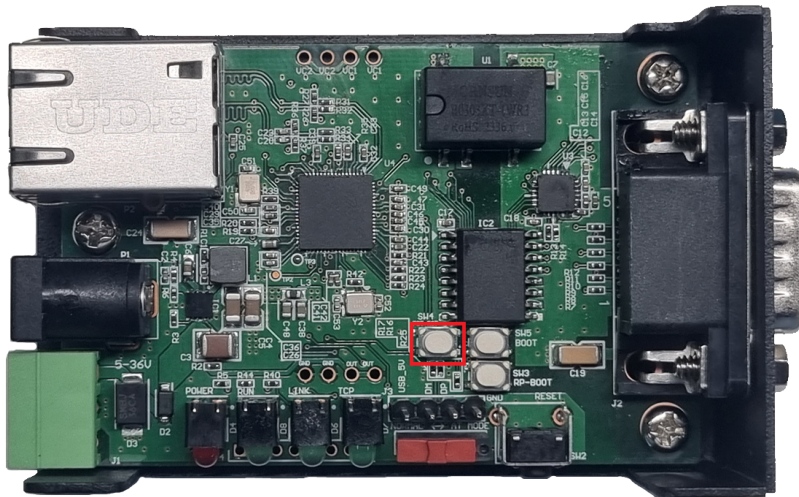
Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

- You can use an AT Mode SW

For more information, see how to use the AT command in the [Manual](#) below.

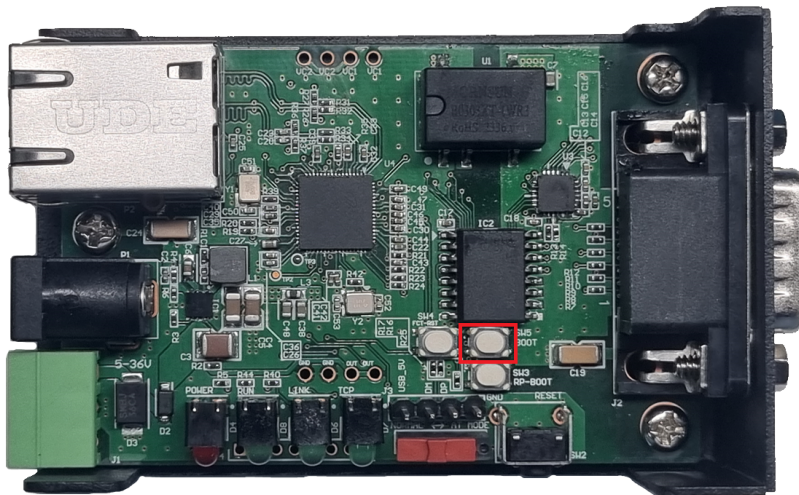
-

Factory Reset SW

**Factory Reset SW**

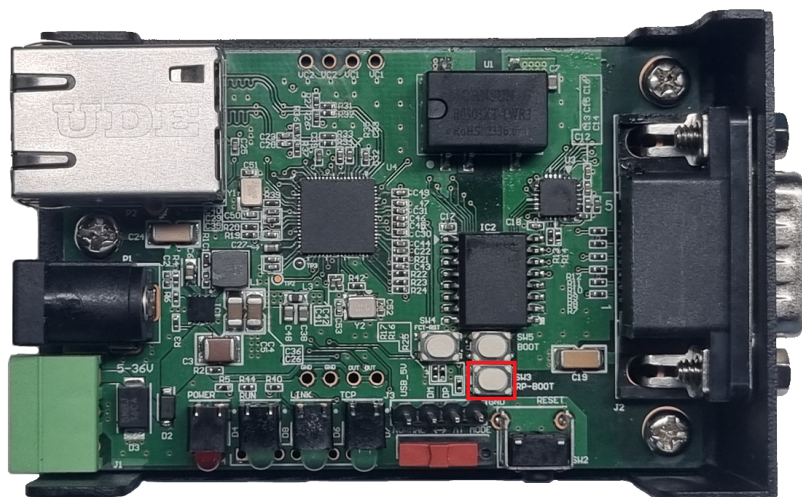
- You can use the factory reset switch to factory reset your device.
For detailed instructions, see the Factory Reset guide in the [Manual](#) below.

BOOT SW

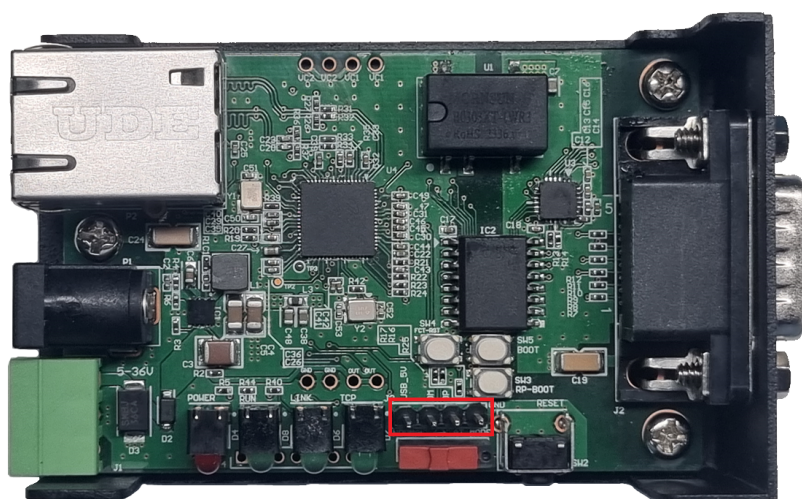
**Boot SW**

W55RP20 BOOT SW

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

**W55RP20 Boot SW**

USB Header

**USB Header**

-The USB header is used to upload and update the FW after the W55RP20 enters BOOT mode. For detailed instructions, see the FW update guide in the [Manual](#) below.

Power on

The W232N can be power enabled.

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

The available voltage is 5 V to 36 V. If the polarity is reversed when power is applied, a protection circuit will prevent the power from being turned on.



During normal operation, the POWER LED will be solid red and the RUN LED will flash in 1-second cycles, confirming that the W232N's FW has booted successfully.

Manuals

- [How to use Config-tool](#)
- [How to use Web config](#)
- [How to use AT CMD](#)
- [How to connect MQTT](#)
- [How to connect SSL](#)
- [How to connect Modbus](#)
- [How to update FW](#)

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊

- [How to do factory reset](#)

Certification

- [KC](#)
- [FCC](#)
- [CE](#)

Design file

schematic

H/W version	Filetype	Download Link	Remarks
1.0	Altium	 Download	-
...	PDF	 Download	-

Part list

H/W version	Filetype	Download Link	Remarks
1.0	Excel	 Download	-
...	PDF	 Download	-

3D file

H/W version	Filetype	Download Link	Remarks
1.0	Step	 Download	-

 [Edit this page](#)

Hello, this is WIZnet - IoT Network Accelerator ⚡ Ask in any language you are comfortable 😊