

InHand Networks

InDTU332W Industrial 3G Data Terminal Unit/Modem



Overview

Compact, ruggedized wireless communication devices are a key component of remote automation deployments worldwide, spanning multiple industries and applications. As a dependable wireless field device, the InDTU332W series of data terminal units (DTU) specializes in serial field communication by utilizing the high-speed WCDMA 3G network.

The InDTU series have provided reliable field communications throughout an extensive global career of service in industrial conditions. Featuring a -40 to 70°C temperature range, 9 to 35 VDC power inputs, a rugged EMC resistant plastic housing and InHand's stringent manufacturing standards, the InDTU332W guarantees communications in industrial conditions. For ease of management, the InDTU332W supports a wide range of configuration tools, including standard PC software, simple SMS configuration and the cloud-based InHand Device Manager for configuring thousands of units in a single click.

With industrial electronics design, rugged ABS shell and patented hardware watchdog procedures, the InDTU332W sets the standard for dependable remote control and telemetry to serial field devices.

Features

■ Rugged Industrial Design

- Industrial components, wide operating temperature at -40 to 70°C, and wide power inputs at 9 to 35 VDC ensure long lifecycles and high reliability.
- Ultra-low power consumption
- Compliant with Remote Terminal Unit standards including the DL/T721-2013 standards

■ High Reliability

- Auto-recovery features including an embedded hardware watchdog to automatically recover from multiple failure events.
- Automatic Link Detection & Recovery: PPP link-layer detection, ICMP, and TCP Keepalives

■ Ease of Management

- Local configuration via serial port
- Supports RTOOL TCP/IP remote monitoring
- Configurable with SMS
- Remote batch configuration utilizing the InHand Device Manager cloud

■ Intelligent Networking Protocols

- Transparent TCP/UDP
- InHand DC protocol
- IEC 101 to 104 Conversion (Serial to Ethernet)
- Modbus RTU/Modbus TCP
- User defined TCP/UDP datagrams
- One to Five multi-servers

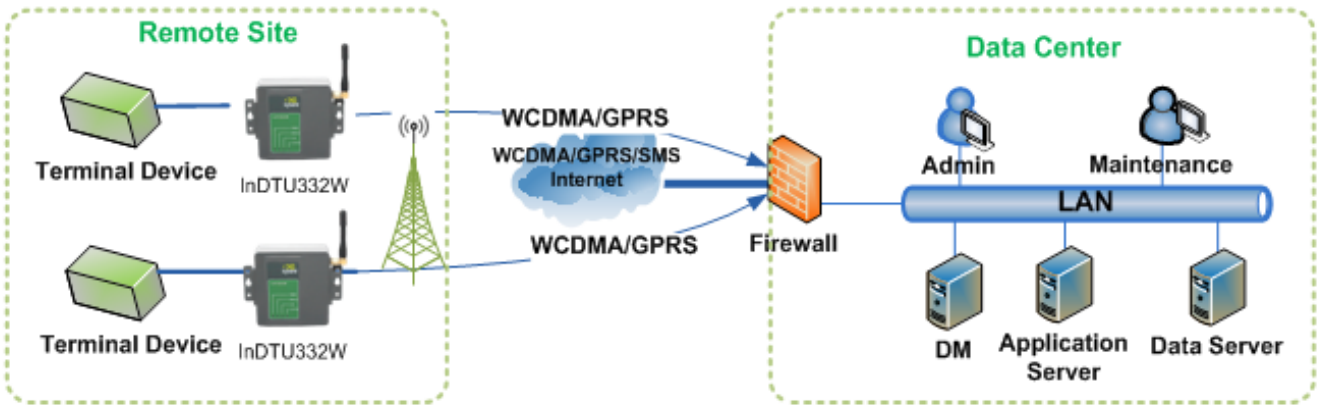
Specifications

Item		InDTU332W	
Software	Network	Internet Access	WCDMA/GPRS, DDNS, (APN)/VPDN
		Access Authentication	CHAP,PAP
		Cellular	InDTU332WS05-232/485: GPRS/EDGE: 900/1800 MHz; WCDMA/HSPA: 900/2100MHz InDTU332WS15-232/485: GPRS/EDGE: 850/1900 MHz; WCDMA/HSPA: 850/1900MHz
		Protocols	IP, ICMP, PPP
			TCP/UDP
			InHand DC TCP/DC UDP
			TCP/UDP, user define TCP/UDP login, Heartbeat packets
			TCP server to establish a TCP connection with the InDTU
			Domain Name Service
		Protocol Conversion	One to five servers
	Modbus RTU/TCP		
	IEC 101 to SMS (optional) IEC 101 to 104 conversion (optional)		
	Security	Management Security	Multi-Level authentication: admin, maintenance
			Login authentication
	Reliability	Upgrade	Patented secure upgrade process
		Link Detection	PPP,ICMP,TCP Keepalives, automatic recover from failure
Watchdog		Self-diagnostics, automatic recovery from failure	
Maintenance	Automatic Dial up	Automatic dial up when powered on	
	On-demand Dial up	Long connection, short connection, activate by data, SMS, phone; scheduled online/offline	

Item		InDTU332W	
		Configuration	RS-232 serial port configuration, RTools, InHand <i>Device Manager</i> Cloud, SMS text messages
		Upgrade	Upgraded via serial port or remotely
		Log	Local syslog, remote logs, export logs via serial port
		Centralized Management	InHand <i>Device Manager</i> cloud-based centralized device management platform
		Config. Backup	Configuration file import and export
Hardware	Interface	SIM card	WCDMAUSIM/SIM card: 3V/1.8V, flip card holder
		Industrial Serial	Dual Serial Ports: RS232/485 optional and RS232 standard Eight pin, 3.81mm industrial terminal Baud Rate: 1200~115200bps Data Format: 8 bit, 1 stop, none parity, no flow control
		Antenna Port	50Ω, SMA Female
	Power Consumption	Power Supply	9 to 35 VDC
		Standby	70mA@12VDC
		Working	73mA@12VDC
		Power on	Under 100mA@12VDC
		Peak	Under 100mA@12VDC
	Environmental	Working	-40 to 70°C
		Storage	-40 to 85°C
		Humidity	5 to 95% relative humidity (noncondensing)
	Mechanical	Housing	ABS engineered plastic shell
		Dimensions (mm)	110x85x35mm
		Installation	Wall mounted

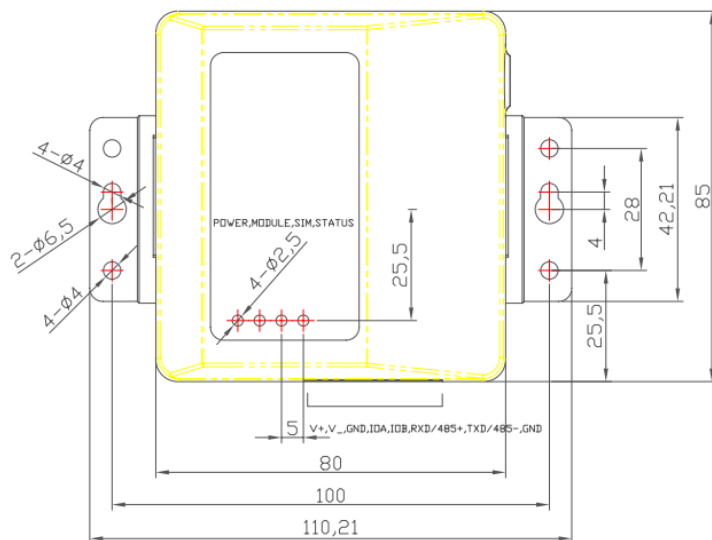
Application

Specializing in industrial and power applications, the InDTU332W provides reliable wireless data communication between remote serial devices and centralized SCADA servers by utilizing the WCDMA 3G network and 2G fallback. Featuring industrial grade design and high reliability network capabilities, the InDTU series are a proven standard in industrial wireless communications.

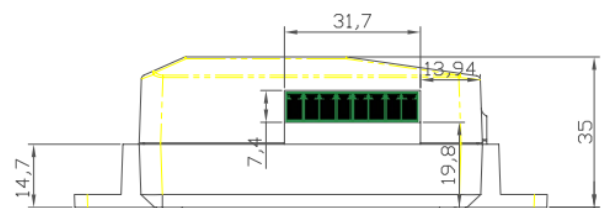


Dimensions(mm)

L×W×H=110×85×35mm



Front View



Side View

Terminal Interface

Eight Pin Industrial Terminal Interface

Pin	Definition	Description
1	GND	GND
2	TXD/485-	Serial port 1 RS232 send or RS485-
3	RXD/485+	Serial port 1 RS232 receive or RS485+
4	TXD2	Serial port 2 RS232 send
5	RXD2	Serial port 2 RS232 receive
6	GND	GND
7	V-	Negative Power Input
8	V+	Positive Power Input

Ordering

Series	Part Number	Network	Serial Type
InDTU332W	InDTU332WS05-232	GPRS/EDGE: 900/1800 MHz; WCDMA/HSPA: 900/2100MHz	RS-232
	InDTU332WS05-485	GPRS/EDGE: 900/1800 MHz; WCDMA/HSPA: 900/2100MHz	RS-485
	InDTU332WS15-232	GPRS/EDGE: 850/1900 MHz; WCDMA/HSPA: 850/1900MHz	RS-232
	InDTU332WS15-485	GPRS/EDGE: 850/1900 MHz; WCDMA/HSPA: 8500/1900MHz	RS-485

InHand Networks

InHand Networks has become the leader in industrial grade network technology by designing and manufacturing rugged cellular routers, industrial Ethernet switches, wireless sensor network devices and cloud based platforms for our industrial partners worldwide.

Partnered with companies such as Rockwell Automation, Schneider Electric and many others, InHand Networks has been recognized by world class partners for quality standards and industrial design over a decorated 14 year career.

InHand Networks - Connecting Devices, Enabling Services.



InHand Networks

3900 Jermantown Rd., Suite 150
Fairfax, VA 22030
USA

T: +1-703-348-2988

F: +1-703-348-2988

General Inquiry: info@inhandnetworks.com

Technical Support: support@inhandnetworks.com