



Industrial, Reliable, Flexible to Manage

# InDTU332G Series

## Industrial Cellular Modem

The InDTU332G series industrial grade wireless data terminal uses GSM/GPRS wireless network as the bearer network to provide wireless data transmission channel over TCP/IP. It functionally completes wireless data communications between remote control station serial devices and the central control system, to enable remote control of industrial field sites.

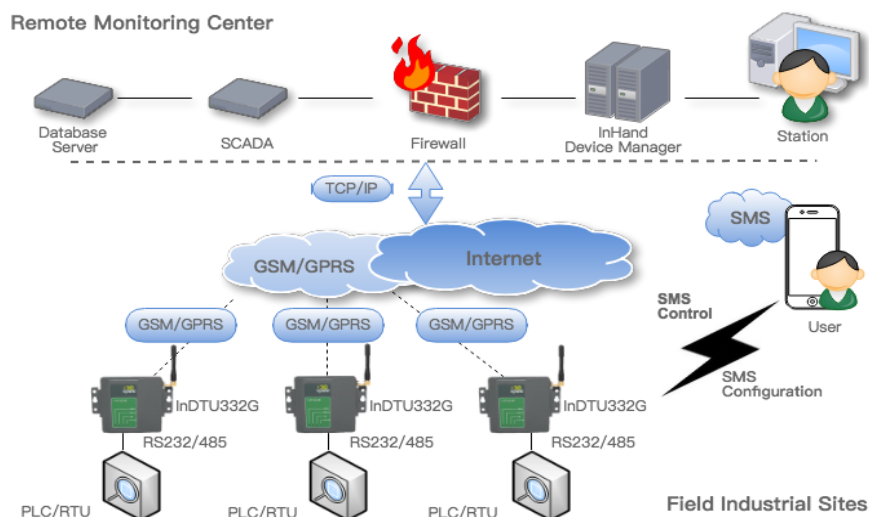
The InDTU332G series is small in size, operates between  $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$  and supports  $+5\sim 35\text{V}$  DC wide voltage input, can provide stable data transmission channels for unattended industrial sites.

The product supports various configuration and management methods including PC end configuration tool, RTool remote management tool and InHand Device Manager "Device Cloud" platform, simplifying on-site deployment and then maintenance work, greatly improving deployment efficiency and reducing overall system operation cost, so that customers can really experience the convenience of wireless communication.

The InDTU332G series products are particularly suitable for data acquisition and monitoring of distributed unattended field devices, such as:

- Electric power distribution automation
- Power meter reading
- Street light monitoring
- Smart water
- Heating system monitoring
- Environmental monitoring
- Meteorological monitoring

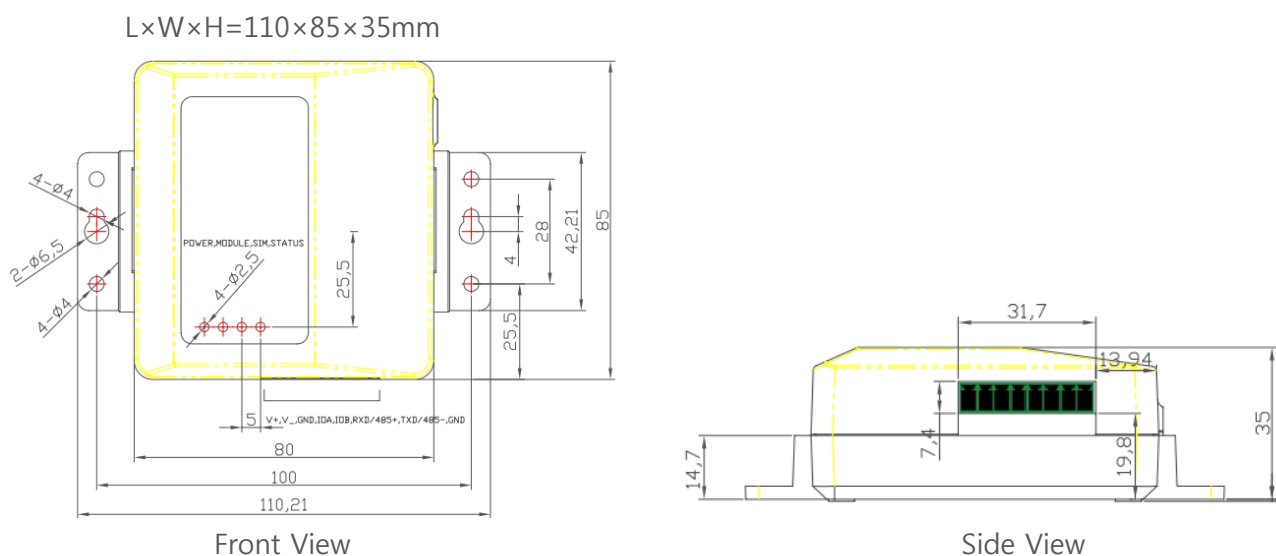
## Application Case



## Features and Advantages

- + Long proven in large-scale applications
- + Quad-Band GSM  
850/900/1800/1900 MHz, support global 2G networks
- + Fully industrial-grade, ready for challenging environments
- + Hardware and software watchdog and multi-layer link detection mechanism, ensure high device availability and reliability
- + Support multiple management gadgets and InHand Device Manager cloud platform for flexible and efficient on-site or remote network management
- + Support industrial protocol conversion to help users solve interconnection issues
- **Fully industrial-grade, ready for challenging industrial environments**
  - ✓ Fully industrial-grade chip, operating temperature as wide as  $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ , support  $+5 \sim 35\text{VDC}$  wide voltage power input, protection rating up to IP30, to provide reliable network communications for electric power, industrial and other unattended sites
  - ✓ Ultra low power consumption, adaptable to various field power supply modes
- **High-reliability design, ensure continuity of data transmission**
  - ✓ Self-recovery: embedded watchdog, self recover from faults, ensuring normal operation of the device
  - ✓ Link redundancy: SMS and GPRS link mutual backup to ensure continuous data transmission
  - ✓ Link detection: multi-layer link detection mechanisms including PPP layer heartbeat, ICMP detection, TCP Keepalive and application layer heartbeat, keeping wireless connection "always on"
- **Efficient to manage, flexible and easy to use**
  - ✓ Support configuration software login via local serial port
  - ✓ Support RTOOL remote configuration over TCP/IP
  - ✓ Support remote batch management by Device Manager "Device Cloud" platform
- **Feature-rich, to provide users with intelligent solutions**
  - ✓ Support transparent TCP/UDP protocol
  - ✓ Support InHand DC protocol
  - ✓ Support Modbus RTU/Modbus TCP protocol conversion
  - ✓ Support user-defined TCP/UDP data packets
  - ✓ Support multi-center, 1-5 centers

## Dimensions (mm)



## Product Specifications

InDTU332G Hardware Specifications	
Item	InDTU332G
<b>Interface</b>	
<b>Industrial Serial Port</b>	2 x Logic serial ports: Serial port 1: RS-232/RS-485 (Optional) Serial port 2: RS-232  RS-232 signal: TXD, RXD, GND RS-485 signal: 485+, 485-, GND  8PIN industrial terminal, 3.81mm pitch
<b>SIM Card Slot</b>	1.8V/3V, drawer-type slot x 1
<b>Antenna</b>	50 Ω / SMA x 1
<b>Mechanical Properties</b>	
<b>Installation Method</b>	Wall-mounting
<b>Protection Rating</b>	IP30
<b>Cooling</b>	Fanless
<b>Housing</b>	ABS engineering plastics
<b>Power Supply</b>	
<b>Power Input</b>	DC5-35V
<b>Power Interface</b>	Pluggable industrial terminal connection
<b>Polarity Reverse Protection</b>	Support
<b>Overload Protection</b>	Support
<b>Environment</b>	
<b>Operating Temperature</b>	-40 ~ 70°C
<b>Storage Temperature</b>	-40 ~ 85°C
<b>Ambient Humidity</b>	5 ~ 95% (non-condensing)
<b>LED Indicators</b>	
<b>LED</b>	POWER, MODULE, SIM, STATUS
<b>EMC Index</b>	
<b>Static</b>	EN61000-4-2, level 3
<b>Surge</b>	EN61000-4-5, level 3
<b>Shock Wave Immunity</b>	EN61000-4-12, Level 3
<b>Certifications</b>	
CE, FCC	

InDTU332G Software Specifications	
Item	InDTU332G
<b>Network Connection</b>	
<b>Network Access</b>	APN, VPDN
<b>Access Authentication</b>	CHAP/PAP
<b>Network Type</b>	Quad-Band GSM 850/900/1800/1900 MHz
<b>Network Protocol</b>	
<b>Network Protocol</b>	Ping, DNS, transparent TCP/UDP, InHand DC TCP/DC UDP, user-defined login/heartbeat data packet
<b>Protocol Conversion</b>	Modbus RTU/TCP protocol conversion
<b>Network Security</b>	
<b>Multi-level Authorization</b>	User levels: administrator, maintenance staff
<b>Certification Security</b>	Support login security certification
<b>Reliability</b>	
<b>Reliable Upgrade</b>	Patent upgrade mechanism, ensures reliable upgrade
<b>Link Connection Detection</b>	Send heartbeat packet detection, auto connect once disconnected
<b>Embedded Watchdog</b>	Device operation self-detection technology, and self-recovery from operation faults
<b>Network Management</b>	
<b>Configuration Method</b>	Support configuration via local serial port, support RTool, Device Manager "Device Cloud" platform remote configuration
<b>Configuration Backup</b>	Support import and export of configuration files
<b>Upgrade Method</b>	Patent upgrade mechanism, upgrade firmware through local serial port or remotely
<b>Log</b>	Support local and remote viewing of logs, facilitate engineers to check device operating status
<b>Dial-on-Demand</b>	Data activation, SMS activation, timed on/off
<b>Network Management</b>	Support InHand Device Manager remote central management

## Ordering Guide

Model	Network	Serial port: <232/485>
InDTU332GS55-232	Quad-Band GSM 850/900/1800/1900 MHz	RS-232
InDTU332GS55-485	Quad-Band GSM 850/900/1800/1900 MHz	RS-485

### About Us

InHand Networks is a global leader of Industrial IoT, with a record of tremendous success following groundbreaking innovation since our inception in 2001.

InHand serves world-class partners and customers with industrial M2M routers, gateways, industrial Ethernet switches, rugged computers and IoT management platforms. We provide IoT solutions for various vertical markets including Smart Grid, Industrial Automation, Remote Machine Monitoring, Smart Vending, Smart City, Retail and more.

Proudly bearing the marks of both Rockwell Automation Encompass Product Partner in Asia-Pacific and Schneider Electric CAPP Technology Partner, while listed on NEEQ 430642 as of February 18, 2014, InHand Networks defines industrial innovation and reliability.

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