D10series Industrial Cellular Modem

Overview

The rugged D10 series DTU (Data Terminal Unit) is a cellular modem have been developed especially for M2M application.

It provides RS232/RS-485/RS-422/TTL interface and equipped with PPP, TCP/IP and DDP protocol, it could convert the user data into 3G, 4G,EDGE or GPRS network and transmits the data to the customer's data service center through complete transparent data channel, allows a simple and rapid integration of cellular network connectivity into M2M application.

With the robust, reliable, long life and compact metal case design, the D10 DTU ideally adapts to onboard standard, easy to deploy and maintenance, it has been widely applied in many fields worldwide, such as power SCADA, oil field, coal mine,weather forecast, environment protection, water conservancy, heating, natural gas, petroleum and so on.

Features

Optimized EMC design

Standard PPP, TCP/IP and UDP/IP protocol

Industrial pluggable terminal block

Industrial 4G/3G/EDGE/GPRS cellular module

Support APN and VPDN wireless private network

Support short message service (SMS)

Support transparent data transmission

Support data service center with dynamic IP address

Support LED status indication

Wide range voltage input

Smart power management

External power on/off control

Reliable, flexible and easy to deploy

Enhanced Features

Multiple operation model

Always online: automatically attaches Mobile network when powered on,automatically re-dials when off-line and keep line alive

Off-line when idle and triggered online by user data, ring or SMS

GPRS/CDMA 1x channel and SMS mutual backup

Online/off-line control by commands via user equipment

Data loop test

Multiple data service centers communications

Supports up to 4 data service centers communications

Supports main/backup data service centers communications

Supports customized setting for each data service center

Flexible and utilitarian data communications

Supports TCP/IP, UDP/IP, DDPTM, SMS and AT

Self-defines transparent or protocol communications

Self-defines customized data frame separator

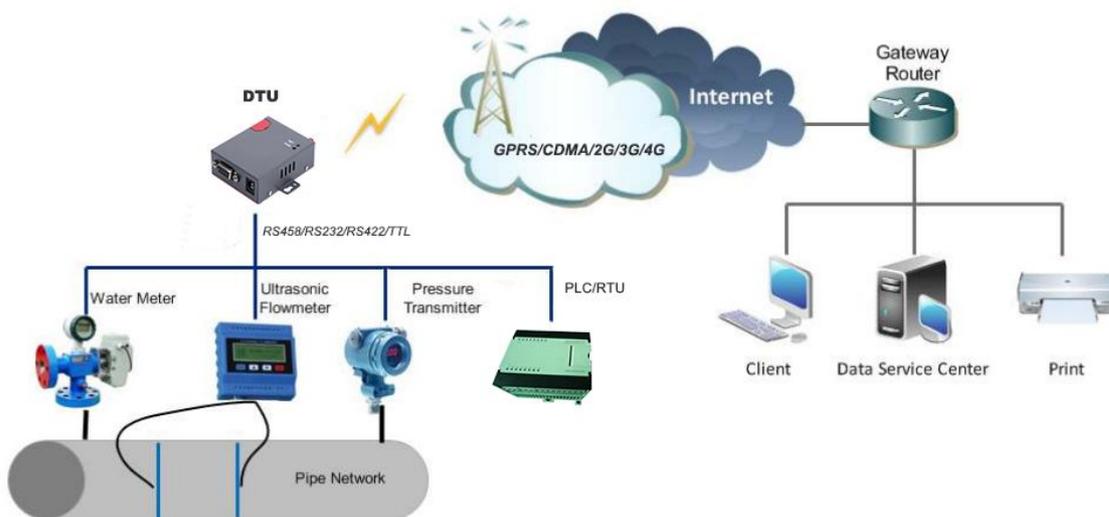Self-defines reconnecting interval

Self-defines heart-beat data frame

Parameters configuration and remote management

Built-in parameters configuration menu

Configuration tool based on PC

Remote parameters configuration via data service center

Remote parameters configuration by SMS

Parameters configuration via AT+ commands

Full function data service center development kits

Provides function development package

Provides complete sets of demo source code (VB, VC, C#, Delphi, VB.net)

Provides data forwarding service center for data transparency forwarding

Typical Applications

Specification

Wireless

Module：	Industrial wireless module
Frequency bands：	FDD-LTE(B 1 / 3 / 5 / 7 / 8 / 20 / 28), (B 1 / 2 / 4 / 5 / 7 / 8 / 12 / 13 / 17 / 25 / 26) TDD-LTE(Band 38 / 39 / 40 / 41) HSPA+/HSPA/WCDMA(850 / 900 AWS / 1900 / 2100MHz) GSM/GRPS/CDMA/EDGE(850 / 900 / 1800 / 1900MHz)
Theory bandwidth:	HSPA: 5.76 / 21Mbps; FDD/TDD LTE: 50 / 150Mbps
Power voltage:	DC +5~26V (standard 12V/1A power adapter)
Power consumption:	Data mode: <70mA/12V; Idle mode: <17mA/12V
Sensitivity:	WCDMA 3GPP TS 25.101(R6) GSM/GPRS 3GPP TS05.05(R99)

Interface

Serial：	Single port, RS-232/RS-485/RS-422/TTL(300~230400bps Baud rate)
AT Command：	SMS via AT Command
Indicator light：	2 indicator, "NET", and "PWR"
Antenna interface:	1*SMA antenna interface(4G/3G), 50 Ω
SIM/UIM：	SIM/UIM, Industrial SIM slot, prevent SIM from falling; 1.8V/3V auto detection

Others

Operation system:	Windows 9x/ME/NT/2000/XP /Win7/ Linux
Appearance:	Casing：Metal, IP34 Dimension：70.5x55x22mm(not including antenna) Weight: about 150g(not including accessories)
Environment:	Working temp: -30~+75℃ Storage temp: -40~+85℃ Related humidity: < 95% non-condensing Warranty: one year

Product model list

Items	Network	Interface
D10-FA2T	LTE-FDD/LTE-TDD	RS-232/RS-485/RS-422/TTL(DTR control WDT)
D10-WA2T	HSPA/GSM/WCDMA	RS-232/RS-485/RS-422/TTL(DTR control WDT)
D10-C12T	CDMA	RS-232/RS-485/RS-422/TTL(DTR control WDT)
D10-G12T	GPRS	RS-232/RS-485/RS-422/TTL(DTR control WDT)