WLINK

WL-D80 DTU

OVER VIEW ▶

The rugged D80 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 D80 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.

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WL-D80 DTU Datasheet

FEATURE ▶

- 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,automaticaly re-dials when off line and keep line alive
- Offline when idle and trigged online by user data, ring or SMS
- GPRS/CDMA 1x channel and SMS mutual backup
- Online/offline 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

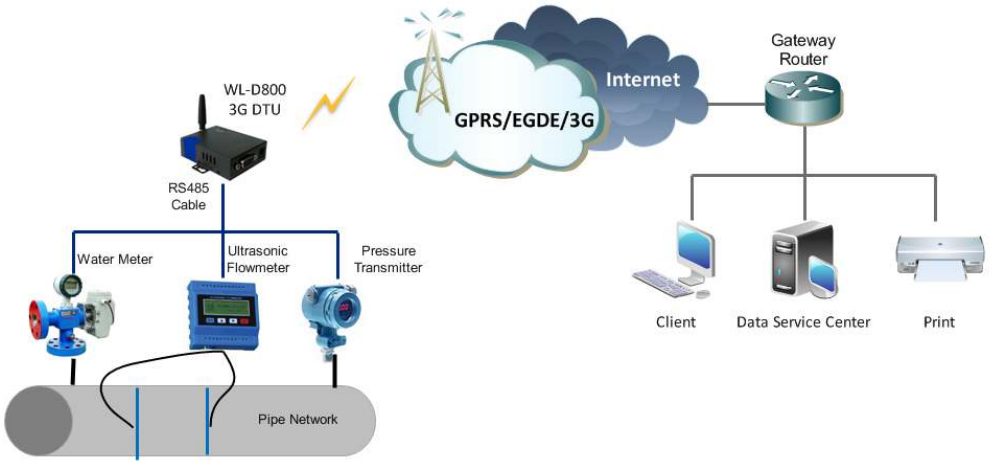
Full function data service center development kits

- 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

WL-D80 DTU Datasheet

TYPICAL APPLICATION ▶

- Power SCADA
- Oil field
- Coal mine
- Weather forecast
- Environment protection
- Water conservancy
- Heating, natural gas
- Petroleum



SPECIFICATION▶

Cellular	GSM/GPRS Protocol, 3GPP version 4 Optional Network: 4G/LTE/HSPA/GPRS/GSM Output Power WCDMA: 24dBm (Power Class3) GPRS/GSM: 33dBm (Power Class4) GPRS/EDGE: Class 2, Class B Sensitivity: WCDMA 3GPP TS 25.101(R6) GSM/GPRS 3GPP TS05.05(R99) IIEEE 802.3u Rate: 300-115200bps
Consumption	Voltage: DC +5~26V (standard 12V/1A power adapter) SIM/R-UIM Card: 3V Consumption Transfer mode: 70mA/12v (Average), Idle mode: 17mA/12V (Max)
Interface	Antenna: SMA-K(Female) Standard SIM/R-UIM interface Serial data interface: Single Port type RS-232/RS-485/RS-422/TTL, DB9 connector
Others	Dimension: 70.5mm x 55.5mm x 22mm (not including antenna) Weight: 150g (not including accessories) Operation temperature: -30~+75℃ Store temperature: -40~+85℃ Related humidity: <95% (non-condensing) Guarantee: one year

WL-D80 DTU Datasheet

ORDERING INFORMATION ▶

Part Number	Network	Frequency Band	Interface
WL-D80-1-2	GPRS/EDGE	850/900/1800/1900MHz	RS-232
WL-D80-1-4			RS-485
WL-D80-1-T			RS-TTL
WL-D80-3-2	HSDPA	900/2100MHz or 850/1900MHz	RS-232
WL-D80-3-4			RS-485
WL-D80-3-T			RS-TTL
WL-D80-34-2	HSDPA	850/900/1900/2100MHz	RS-232
WL-D80-34-4			RS-485
WL-D80-34-T			RS-TTL
WL-D80-4-2	FDD-LTE,TDD-LTE	800/900/1800/1900/2100/2300/2500/ 2600MHz (Band 1,3,5,7,8,20,38,40,41)	RS-232
WL-D80-4-4			RS-485
WL-D80-4-T			RS-TTL
WL-D80-5-2	FDD-LTE,TDD-LTE	FDD-LTD: 700/850/900/1700/1800/1900/ 2100/2300/2600MHz B1/B2/B3/B4/B5/B7/B8/B28/B40	RS-232
WL-D80-5-4			RS-485
WL-D80-5-T			RS-TTL

D8X DATA TERMINAL COMPARISION ▶

Series	Image	Network	Interface	Comsuption	Power Supply	Dimension (mm)
D80		4G/3G/GPRS	1x RS-232/485/TTL (DB9 type)	Transfer mode: 70mA/12v (Average) Idle mode: 15mA/12V (Max)	5 ~ 32VDC	70.5 x 55 x 22
D82		4G/3G/GPRS	1x RS-232 1x RS-485 (PIN type connector)	Transfer mode: 80mA/12v (Average) Idle mode: 7mA/12V (Max)	7.5 ~ 32VDC	64 x 72.5 x 25.5
D83		NB-IoT/CAT-M1	1x RS-232/485/TTL (DB9 type)	Transfer mode: 65mA/12v (Average) Idle mode: 15mA/12V (Max)	5 ~ 32VDC	70.5 x 55 x 22