

WL-D80 DTU



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.

WL-D80 DTU Datasheet



- 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 onautomatically redials 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

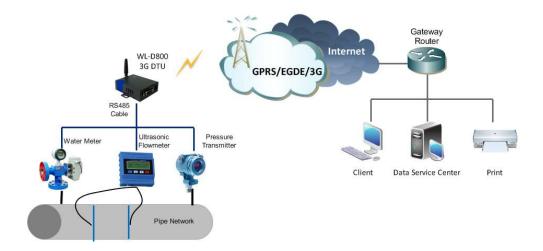
- Provides function development package
- Provides complete sets of demo source code (VB, VC, C#, Delphi, VB.net)
- Provides data forwarding service center for data transparency forwarding



WL-D80 DTU Datasheet



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





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 55.5m x 22mm (not including antenna) Weight: 150g (not including accessories) Operation temperature: -30~+75°C Store temperature: -40~+85°C Related humidity: <95% (non-condensing) Guarantee: one year			





Part Number	Network	Frequency Band	Interface
WL-D80-1-2			RS-232
WL-D80-1-4	GPRS/EDGE	850/900/1800/1900MHz	RS-485
WL-D80-1-T			RS-TTL
WL-D80-3-2	HSDPA		RS-232
WL-D80-3-4		900/2100MHz or 850/1900MHz	RS-485
WL-D80-3-T			RS-TTL
WL-D80-34-2	HSDPA	-34-2	RS-232
WL-D80-34-4		HSDPA 850/900/1900/2100MHz	RS-485
WL-D80-34-T			
WL-D80-4-2	FDD-LTE,TDD-LTE		RS-232
WL-D80-4-4		800/900/1800/1900/2100/2300/2500/ 2600MHz (Band 1,3,5,7,8,20,38,40,41)	RS-485
WL-D80-4-T			RS-TTL
WL-D80-5-2	FDD-LTE,TDD-LTE	EDD LTD: 700/050/000/4700/4900/4000/	RS-232
WL-D80-5-4		FDD-LTD: 700/850/900/1700/1800/1900/ 2100/2300/2600MHz B1/B2/B3/B4/B5/B7/B8/B28/B40	RS-485
WL-D80-5-T	- 11-21-21-11-21-21-21		RS-TTL



D8X DATA TERMINAL COMPARISION ▶

Series	Image	Network	Interface	Comsuption	Power Supply	Dimension (mm)
D80	d of	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 5.5 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	050	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 5.5 x 22

