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OVER VIEW

The rugged D80 series DTU (Data Terminal Unit) which 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, 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.

Single Serial Port   Dual Serial Port

FEATURES

- Optimized EMC design
- Standard PPP, TCP/IP and UDP/IP protocol
- Industrial pluggable terminal block
- Industrial 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 GPRS/CDMA 1x when powered on
  - automatically 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

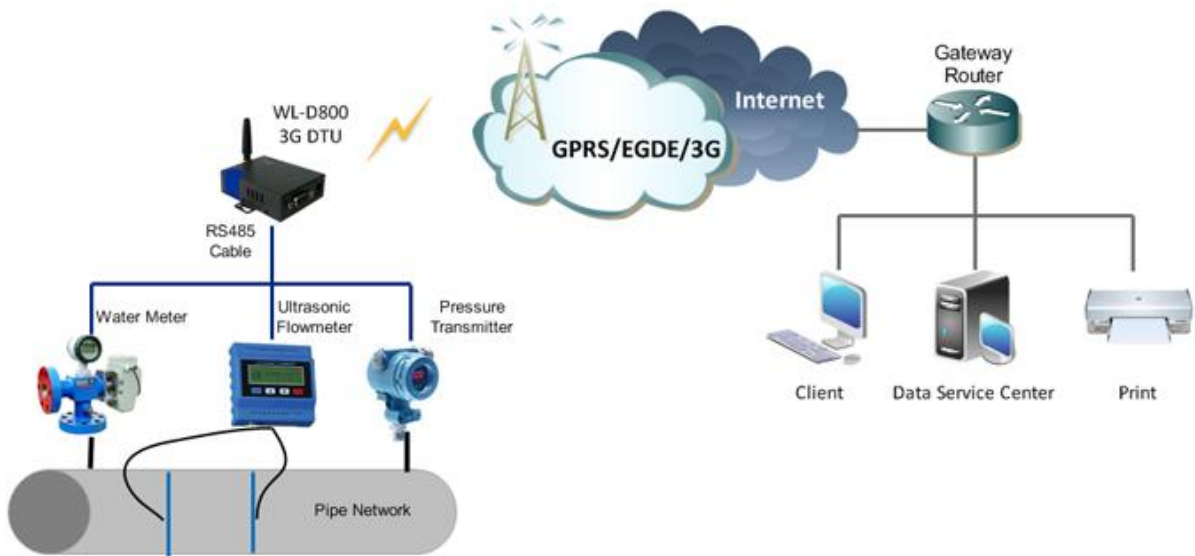### Parameters configuration and remote management

- 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

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
	● Frequency Band: WCDMA/UMTS 2100/1900/900/850Mhz, GSM 850/900/1800/1900Mhz
	● 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)
	● IEEE 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
	Dual Port type: RS-232 + RS-485, Terminal block connector
Others	● Dimension: 70.5mm x 55.5m 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

Ordering Information

Part Number	Network	Frequency Band	Interface
WL-D80-1-2	GPRS/EDGE	850/900/1800/1900MHz	RS-232
WL-D80-1-4	GPRS/EDGE	850/900/1800/1900MHz	RS-485
WL-D80-1-T	GPRS/EDGE	850/900/1800/1900MHz	RS-TTL
WL-D80-3-2	HSDPA	900/2100MHz or 850/1900MHz	RS-232
WL-D80-3-4	HSDPA	900/2100MHz or 850/1900MHz	RS-485
WL-D80-3-T	HSDPA	900/2100MHz or 850/1900MHz	RS-TTL
WL-D80-34-2	HSDPA	850/900/1900/2100MHz	RS-232
WL-D80-34-4	HSDPA	850/900/1900/2100MHz	RS-485
WL-D80-34-T	HSDPA	850/900/1900/2100MHz	RS-TTL
WL-D80-4-2	FDD-LTE, TDD-LTE	1800/2100/2600MHz (Band 1,3,7) 1900/2300/2600MHz (Band 38.39.40.41)	RS-232
WL-D80-4-4	FDD-LTE, TDD-LTE	1800/2100/2600MHz (Band 1,3,7) 1900/2300/2600MHz (Band 38.39.40.41)	RS-485
WL-D80-4-T	FDD-LTE, TDD-LTE	1800/2100/2600MHz (Band 1,3,7) 1900/2300/2600MHz (Band 38.39.40.41)	RS-TTL
WL-D80-1-24	GPRS/EDGE	850/900/1800/1900MHz	1xRS-232 1xRS-485
WL-D80-3-24	HSDPA	900/2100MHz or 850/1900MHz	1xRS-232 1xRS-485
WL-D80-4-24	FDD-LTE, TDD-LTE	1800/2100/2600MHz (Band 1,3,7) 1900/2300/2600MHz (Band 38.39.40.41)	1xRS-232 1xRS-485

Note:

The above list includes partial of WLINK models only, please consult WLINK sale person or distributor if can't find a suitable model from the above list.