WLINK

WL-D82 DTU

OVER VIEW ▶

The rugged D82 data terminal is the two serial port supported serial to IP M2M cellular terminal, called DTU (Data Transfer Unit) as well. It provides two Rs232/Rs485, 2xDI, 2xDO interface and is equipped with PPP, TCP/IP and DDP protocol, it could convert the user serial data into IP data and then transmits the data to the customer's data service center through complete transparent data channel over 4G LTE/3G/GPRS mobile network, 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 D82 terminal ideally adapts to onboard standard, easy to deploy and maintain, 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-D82 DTU Datasheet

▌▌ FEATURE ▶

- ▶ Optimized EMC design
- ▶ Two serial (RS-232/RS-485) port
- ▶ Support PPP, TCP/IP and UDP/IP protocol
- ▶ Industrial pluggable terminal block
- ▶ M2M 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
- Transfer data to a phone number by SMS

Multiple data service centers communications

- Supports up to 2 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, SMS and AT
- Self-defines transparent or protocol communications
- Self-defines customized data frame separator
- Self-defines reconnecting interval
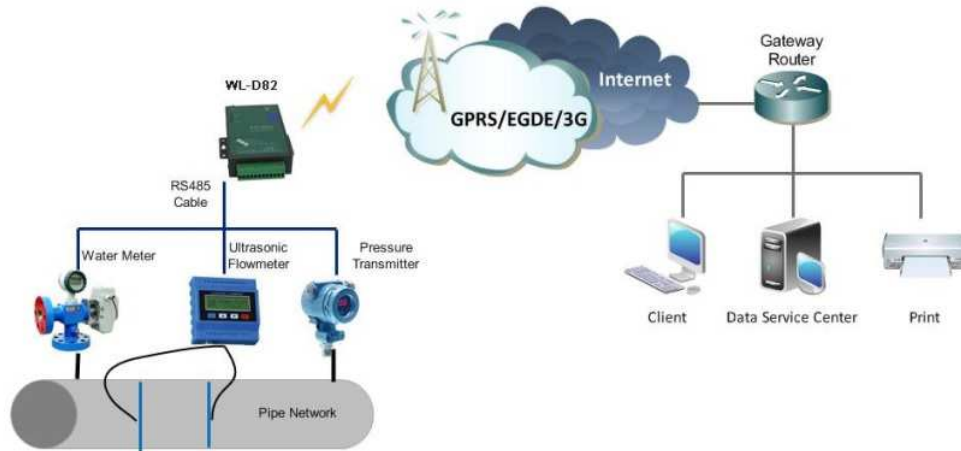- Self-defines heart-beat data frame

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
- Manageable by Wlink M2M management platform

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TYPICAL APPLICATION ▶

- ▶ Power SCADA
- ▶ Coal mine
- ▶ Environment protection
- ▶ Heating, natural gas

- ▶ Oil field
- ▶ Weather forecast
- ▶ Water conservancy
- ▶ Petroleum

SPECIFICATION▶

Cellular	GSM/GPRS Protocol, 3GPP version 4 Optional Network: 4G LTE, 3G HSDPA, 2G EDGE/GPRS Output Power ・ Class3 (23dBm±2dB) For LTE FDD/TDD, Class 3 24dBm+1/3dB for WCDMA ・ Class E2 (27dBm±3dB) for EDGE 850/900MHz ・ Class E2 (26dBm+3/-4dB) for EDGE 1800/1900MHz Sensitivity: LTE B1/3: -101.5dBm, LTE B2/4/5/: -101dBm, LTE B7: -99.5dBm, WCDMA B 1/2/4: -110dBm, WCDMA B5: -110.5dBm Protocol: PPP, TCP, UDP, Ping Rate: 300-115200bps
Consumption	Voltage: DC +7.5~32V (standard 12V/1A power adapter) Consumption Transfer mode: 80mA/12v (Average), Idle mode: 7mA/12V (Max)
Interface	Antenna: SMA-K(Female), 50ohm Standard SIM/R-UIM interface, 1.8/3V micro-SIM Serial data interface: RS-232/RS-485, Terminal block connector
Others	Dimension:72.2mm x 64mm x25.5mm (not including antenna) Weight: 150g (not including accessories) Operation temperature: -30~+75℃ Store temperature: -40~+85℃ Related humidity: <95% (non-condensing) Guarantee: one year

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ORDERING INFORMATION ▶

Part Number	Network	Frequency Band	Interface
WL-D82-1-24	GPRS/EDGE	850/900/1800/1900MHz	RS-232
			RS-485
WL-D82-3-24	HSDPA	900/2100MHz or 850/1900MHz	RS-232
			RS-485
WL-D82-4-24	FDD-LTE,TDD-LTE	800/900/1800/1900/2100/2300/2500/2600MHz (Band 1,3,5,7,8,20,38,40,41)	RS-232
			RS-485
WL-D82-5-24	FDD-LTE,TDD-LTE	700/850/900/1700/1800/1900/2100/2600/2300MHz (Band 1,2,3,4,5,7,8,28)	RS-232
			RS-485

Note:

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

D8X DATA TERMINAL COMPARISION ▶

Series	Image	Network	Interface	Comsumption	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