

# DX-3001H9 Series

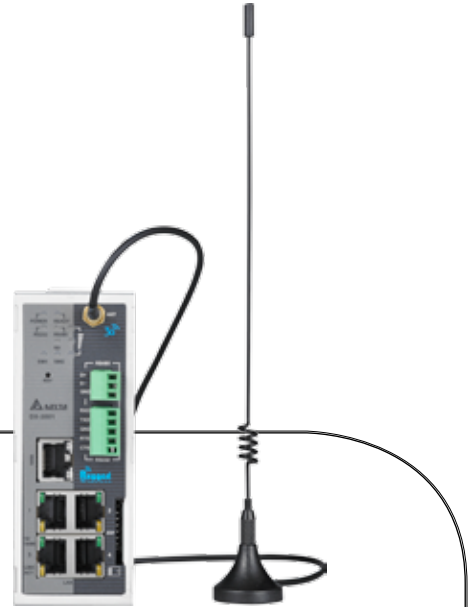
## Industrial 3G/WAN DIACloud Cloud Routers



-20~70°C



FANLESS



- ▶ A data acquisition equipment connected to cloud servers. Supports a two-way data collection channel between the device and the cloud
- ▶ Supports MODBUS TCP and MODBUS ASCII/RTU protocols
- ▶ Using UMTS/HSPA+ 3G technology, supports a wide range of bands (850 / 800, 900, AWS1700, 1900, 2100 MHz). Downward compatible with GSM/GPRS/EDGE 2G network
- ▶ Dual SIM redundancy design : seamless switch between two ISP systems for continuous Online
- ▶ HSPA+ data transmission rate up to 21.6Mbps (downlink) / 5.76Mbps (uplink)
- ▶ Automatic APN parameter matching and connection redial
- ▶ Flexible connection method over WAN port, e.g. static IP, DHCP client and HTTP Proxy
- ▶ User configurable priorities of the connection to Internet over WAN and 2 cellular networks
- ▶ Various peripheral interfaces include RS-485, RS-232 and 4 LAN ports
- ▶ Built-in RTC and supports NTP time synchronization over a network
- ▶ Supports TCP/IP, UDP, ICMP, DHCP, HTTP, DNS and SSH protocols
- ▶ Device configurations import/export
- ▶ Network data flow statistics
- ▶ Device and PLC interlocking
- ▶ Networking failure diagnostics

## Specifications

### TECHNOLOGY

#### Standard Compliance

- GSM/GPRS/EDGE/UMTS/HSPA+
- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-T(X)

# Specifications

## INTERFACE

### 3G

#### GSM/GPRS/EDGE/UMTS/HSPA+

##### Antennas:

- 1 2.5dBi omni-directional, SMA (male) connector, 3 meters cable with magnetic stand

#### Fast Ethernet

##### RJ45 Ports:

- WAN: 1 10/100Base-T(X), auto MDI/MDI-X, auto negotiation
- LAN: 4 10/100Base-T(X), auto MDI/MDI-X, auto negotiation

#### Serial Communication

##### Serial Ports :

- 1 RS-232 (3-pin Terminal block), 1 RS-485 (3-pin Terminal block), 15KV isolation protection

##### Baud Rate:

- 2400bps to 115200bps

##### Data Bits:

- 7, 8

##### Parity:

- None, Even, Odd

##### Stop Bits:

- 1, 2

##### Flow Control:

- RTS/CTS (RS-232 only), XON/XOFF

##### RS-232:

- Tx/D, Rx/D, RTS, CTS, GND

##### RS-485

- D+, D-, GND

#### LEDs

##### Device:

- POWER, READY, SIM1, SIM2, SD, Signal Strength

##### RJ45 Ports:

- 100M, LINK/ACT

##### Serial Ports:

- RS-232, RS-485

#### SIM Slot

- Number of SIMs: 2, Mini-SIM (25mm x 15mm)
- SIM Operating Voltage: 1.8V/3V

#### SD Socket

- SDHC(32mm x 24mm x 2.1mm), up to 32GB

#### Reset Button

- 1 set

### 3G RF

#### Frequency Band:

- UMTS/HSPA+: 800/850, 900, AWS1700, 1900, 2100 MHz
- GSM/GPRS/EDGE: 850, 900, 1800, 1900 MHz

#### Data Transmission Rates

##### HSPA+:

- Up link 5.76 Mbps
- Down link 21.6 Mbps

##### UMTS:

- Up link 384 kbps
- Down link 384 kbps

##### EDGE:

- Up link 236.8 kbps
- Down link 296 kbps

##### GPRS:

- Up link 85.6 kbps
- Down link 85.6 kbps

#### RF Output Power:

- Class 4 (2 W, 33 dBm) @GSM 850 / 900
- Class 1 (1 W, 30 dBm) @GSM 1800 / 1900
- Class 3 (0.25 W, 24 dBm) @UMTS
- Class E2 (0.5 W, 27 dBm) @EDGE 850 / 900
- Class E2 (0.4 W, 26 dBm) @EDGE 1800 / 1900

#### Receiver Sensitivity :

- -108 dBm @ UMTS
- -107 dBm @ GSM 850 / 900 MHz
- -106 dBm @ DCS1800 / PCS1900 MHz

## MANAGEMENT

#### VPN

- IPSec, OpenVPN, PPTP, L2TP, GRE

#### Software

- SSH, DNS, HTTP, TFTP, DHCP Server/Client, Syslog, NTP, MODBUS RTU Master, SNMP Server

#### Security

- MAC/IP/URL filtering, SSH, SPI, Prevent denial of service (DoS) attacks, Port triggering, Port mapping

#### Configuration

- Web Browser

## POWER REQUIREMENTS

#### Input Voltage

- 12 to 48V<sub>DC</sub>, 2 pin terminal block input

#### Input Current

- Max. 1A

#### Overload Current Protection

- Present, Max. Input current 1.5A

#### Reverse Polarity Protection

- Present

## PHYSICAL

### Housing

- IP30 metal case

### Dimensions

- 145.3 mm (H) x 45 mm (W) x 112.3 mm (D)

### Weight

- 372g

### Installation

- Industrial DIN-Rail and Wall mounting

## ENVIRONMENTAL LIMITS

### Operating Temperature

- -20°C to 70°C (-4°F to 158°F)

### Storage Temperature

- -40°C to 85°C (-40°F to 185°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensing)

## APPROVALS

### Safety

- UL 60950-1
- IEC 60950-1

### EMI

- FCC 47 CFR Part 15 Subpart B Class B
- EN 55022
- EN 55032
- EN 301 489-1/7/24

### EMS

(EN 301 489-1/7/24, EN 55024)

- IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8

### RF

- EN 301 511, EN 301 908-1
- FCC Part 22H, 24E, 27

### Environmental Type Tests

#### Cold Temperature:

- IEC 60068-2-1

#### Dry Heat:

- IEC 60068-2-2

#### Humidity:

- IEC 60068-2-30

#### Shock:

- IEC 60255-21-2

#### Freefall:

- IEC 60068-2-32

#### Vibration:

- IEC 60068-2-6

#### Hi-Pot:

- 1.5KV

## Ordering Information

Product		Port Combination			Interface			Region
Model Name	Operating Temperature	10/100 Base-T(X)	RS-232	RS-485	DI	DO (Relay)	Power Input	
DX-3001H9-V	-20°C to 70°C	5	1	1	---	---	1	China, EU, USA

### Optional Products

DVP/CliQ/PMC Series: 12/24 V<sub>DC</sub> Industrial Power Supply

CliQII/PMC Series: 48 V<sub>DC</sub> Industrial Power Supply