

Four-Faith Distributed Processing Unit

F-DPU100

M2M 3G/4G Distributed Processing Unit



Overview

F-DPU100 is an IoT Distributed Processing Unit designed for the wireless remote and large data transmission. It provides the powerful processing ability of data from Ethernet, Standard RS232, Standard RS485, WIFI or other different communication interfaces for different SCADA platforms, Power protection devices, Intelligent equipment, Different management systems etc. Its main function is to process UL and DL data, complete different protocols' forwarding, and achieve transparent transmission of application software communication between different systems and protocols.

Benefits

- Protocols Supported: IEC101, IEC104, ModBus, DNP3.0 etc.
- Advanced Failover: Maximizes uptime by seamlessly switching between the multiple Internet interfaces (cellular, WAN, WIFI, dual-SIM).
- Multiple Tunneling Schemes: Secure your data using a variety of VPN tunneling schemes, including IPSec, L2TP, PPTP, OpenVPN and GRE.
- Ethernet, serial and I/O for connecting diverse field assets.
- Flexible WIFI: 802.11b/g/n(2.4GHz) and 802.11ac(5GHz) dual-band WIFI, configurable WIFI as WAN or access point, WIFI Security (WEP / WPA / WPA2 Mixed Mode) and multiple SSID.
- Gigabit Ethernet ports.
- Four-Faith Remote Manager provides mass configuration, device management, OTA update, and troubleshooting tools.

Application Example



Packing List



F-DPU100



Cellular Antenna



WIFI Antenna



Power



Terminal Block



Line

Specifications

CELLULAR WAN

- Supported Frequency Bands
 - LTE: B1, B2, B3, B4, B5, B7, B8, B20, B28
 - WCDMA: 2100(B1), 1900(B2), 850(B5)
 - EV-DO/CDMA: 800(BC0)
 - GSM/GPRS/EDGE: 850/900/1800/1900
- Automatic SIM based network operator switching

HOST INTERFACES

- 10/100/1000 Base-T RJ45 Ethernet port
- (1)RS-232 ,(5)RS-485 Serial Console Port
- 3 SMA antenna connectors (WIFI and Double-cellular)
- (6) pin,(14)pin 3.5mm terminal block

INPUT/OUTPUT

- (6) pin 3.5mm terminal block.
- (2) DI, (1) DO, (1) Relay.
- Input ON Voltage: 5 to 30 VDC.
- Input OFF Voltage: 0 to 3 VDC.
- Output < 50mA @ 30VDC.
- Relay:1A 250VAC/30VDC

LAN

- DNS, DNS Proxy
- DHCP Server
- IP Passthrough (option)
- VLAN
- Host Interface Watchdog
- PPPoE

SERIAL

- TCP/UDP PAD Mode
- Modbus (ASCII, DTU, Variable)
- PPP
- Reverse Telnet

EVENTS ENGINE (Option)

- Custom event triggers and reports.
- Configurable interface, no programming.
- Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature.
- Report Types: TCP, UDP, SMS, SNMP Trap, HTTP, JSON.
- Event Actions: Drive Relay Output.

WIFI

- IEEE802.11 ac, compatible IEEE 802.11 b/g/n.
- AP and client mode.
- Adjustable output power (Max: 26dBm)
- Access point for up to 30 clients
- Simultaneous access point/client mode
- WEP, WPA-PSK, WPA2-PSK etc. Security

NETWORK AND ROUTING

- Network Address Translation (NAT)
- Port Forwarding
- Host Port Routing
- VRRP
- Reliable Static Route
- Dynamic DNS

VPN

- IPsec, GRE, and OPENVPN Client
- Up to 10 concurrent tunnels
- Split Tunnel
- Dead Peer Detection (DPD)
- Multiple Subnets
- VPN Failover

SECURITY

- Remote Authentication
- DMZ
- Inbound and Outbound Port filtering
- Inbound and Outbound Trusted IP
- MAC Address Filtering.

GPS (Option)

- Antenna Interface: SMA Female, 50 ohms impedance
- Tracking Sensitivity: better than -144 dBm
- Horizontal position accuracy: 2.5 m
- Time-To-First-Fix: 29 s
- Protocol: NMEA-0183 V2.3

OPERATION ENVIRONMENT

- Operating Temperature: -35°C to +75°C / -31°F to +167°F
- Storage Temperature: -40°C to 85°C / -40°F to 185°F
- Humidity: 90% RH @ 60°C

Specifications

MANAGEMENT SERVICE

- Secure cloud-based device management application
- Remote provisioning
- Gateway configuration and template management
- Configurable monitoring and alerting
- Software and radio module firmware updates
- Auto configuration

MANAGEMENT INTERFACES

- Web-Based User Interface
- Device Configuration Templates
- Software and radio module firmware updates
- AT Command Line Interface (Telnet/SSH/Serial)
- SMS Commands (Option)
- SNMP

DIMENSIONS

- Housing & Weight: Metal, 700g
- Dimension: (L x W x H): 172 x 122 x38 mm
- Installation: 34.6 mm Din-Rail or wall mounting or desktop

Selection and Ordering Data

Model No.	Description
F-DPU100-W	Cellular (WCDMA/HSDPA/HSUPA/HSPA+), WIFI, SIM*1(Expandable to 2), I/O(2*DI, 1*DO, 1*Relay.) , 1*RS-232,5*RS-485
F-DPU100-FL	Cellular (LTE/WCDMA), WIFI, SIM*1(Expandable to 2), I/O(2*DI, 1*DO, 1*Relay.) , 1*RS-232,5*RS-485
F-DPU100-L	Cellular (LTE), WIFI, SIM*1(Expandable to 2), I/O(2*DI, 1*DO, 1*Relay.) , 1*RS-232,5*RS-485
F-DPU100-W/W	Cellular (WCDMA/HSDPA/HSUPA/HSPA+, Dual-Module), WIFI, SIM*2, I/O(2*DI, 1*DO, 1*Relay.) ,1*RS-232,5*RS-485
F-DPU100-FL/FL	Cellular (LTE/WCDMA, Dual-Module), WIFI, SIM*2, I/O(2*DI, 1*DO, 1*Relay.) , 1*RS-232,5*RS-485
F-DPU100-L/L	Cellular (LTE, Dual-Module), WIFI, SIM*2, I/O(2*DI, 1*DO, 1*Relay.) , 1*RS-232,5*RS-485