ENVIDATA 2101 - Data Transmission Solution

- Embedded LTE Cat 4 Smart Module Max. 150Mbps downlink/50Mbps uplink.
- Qualcomm Snapdragon 210 MSM8909 four ARM Cortex-A7 CPU cores (quad core) with a clock rate of up to 1.1 GHz.
- · Yocto Linux OS.
- 1GB LPDDR3 + 8GB eMMC.
- Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage.
- Dual-SIM technology access to 2 independent GSM networks ensures superior availability.
- Dual Ethernet network interfaces for local and public.
- · Standard communication protocols.
- Remote configuration, programming, diagnostics and firmware upgrade over network

With the ability to receive and transmit information from various sources and devices, the ENVIDATA 2101 is limitless in gathering data from environmental sensors, scientific measuring instruments, and other automated systems. This empowers the ENVIDATA 2101 to establish a highly connected system, continuously and accurately collecting data, thereby aiding us in constructing a comprehensive picture of our surroundings.

Resources

- Ethernet port 10Base-T/100Base-TX
- 16 binary digital inputs (isolation) can be configured as a counter (250Hz)
- · 12 binary outputs (isolation)
- · 8 analog inputs 4-20 mA (isolation)
- 2 RS-485 and 1 RS-232 serial port for external devices (isolation)
- · Supports memory SD cards up to 64GB
- · RGB LCD (720x1280 pixels) 5 inch via touch screen
- · Diagnostic LEDs
- · 2 SIM holders Dual-SIM support
- · Internal flags and registers for user application program
- · Firmware Flash memory with remote update capability
- · RTC with external synchronization functions
- * Subject to change without notice





Funtionality *

- · Support Webserver for configuration
- Standard communication protocols: Modbus RTU RS485, Modbus TCP/IP
- Remote configuration, programming, diagnostics and firmware upgrade over network
- Data and Event logger supporting SDHC card FAT32 formatted
- · Internal memory: IGB (optional)
- RTC with external synchronization functions (NTP)
- Multiple communication protocols for IOT platform: MQTT, Sparkplug/gRPC (optional)
- · Integrate with iLotusLand, Azure
- · IOT/AWS IOT (optional) via MQTT
- Easy configuration via Envidata Smart Flow based on Node-RED
- · Extendable communication interface
- · Fingerprint security
- · Configuration via phone
- Automatically synchronize time according to local time zone
- · Transmission modes
- · » Internet
- · » GPRS/UMTS/HSPA+/LTE packet transmission
- · » SMS: up to 32 numbers
- · » API with json payload (option)
- » MQTT (Publish/Subscribe)
- » Multiple FTP ,FTPS, SFTP: 4 FTP Server or more, domain name support
- In FTP mode, in case of interrupted data transmission, after system recovery, the data with interruptions will be automatically retransmitted.



- Access to module resources using standard protocols MODBUS RTU and MODBUS TCP
- Intelligent packet routing and Multi-master support in MODBUS mode
- Data and event recording with 0,1 sec res. and SDHC backup rate interval: 1 min, 2 min, 3min, 5 min, 10 min,15 min, 30 min, 1 hour and longer
- Transmission of data from external devices connected to RS-232/485 serial port
- Remote configuration and programming over network
- · DIN rail mounting
- Supply voltage 12 to 30 VDC (24 VDC required for battery buffered power supply operation)
- · Detachable terminal blocks
- Sending logged data as a text or CVS format file to the configured FTP servers
- Configurable access security list of authorized IPs (upto 64 numbers) and tel. numbers (upto 32 numbers), optional password
- Configurable SMS messages triggered by alarms and scheduled
- · Dynamic fields in SMS text

Power Supply

DC	10.8V - 30V
Input current (@24V)	Idle: 0.2A Active: 1.5A Max: 2.0A
Digital input	Input voltage range 0–30 V Input current 2,4 mA Input voltage ON (1) >9,4 V Input voltage OFF (0)
Digital output	Maximum output current 100 mA Voltage drop @ 100 mA
Analog input	
Input current range	4-20mA
Maximum input current	33mA
Dynamic input impedace	150 Ohm
Voltage drop @20mA	<3V
A/D converter resolution	18 bits
Accuracy	0.2%

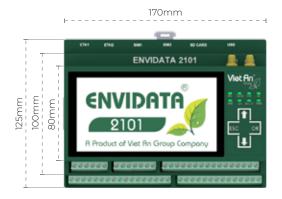
Frequency Bands

LTE-FDD	B1/B3/B5/B7/B8/B20
LTE-TDD	B38/B40/B41
WCDMA	B1/B5/B8
GSM/EDGE	850/900/1800/1900 Mhz

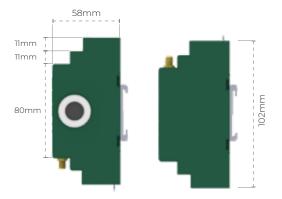
Configuration utility



Dimensions







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