



IOT LORA GATEWAY

DDLG SERIES



SYNOPSIS

- LORA DEVICES DDLG SI, ACCESS POINT DDLG APS ARE IDEAL FOR MACHINE MONITORING AND SENDING SENSOR DATA USING LORA WIRELESS TECHNOLOGY, OVER LONG RANGE
- DDLG SI LORA TRANSMITTERS CONNECT TRANSPARENTLY TO THE DDLG APS ACCESS POINT. DDLG SI SENDS IO DATA OR FIELD MODBUS SLAVE DEVICES DATA TO THE DDLG APS, WHICH GIVES OUTPUT IN MODBUS RTU INTERFACE FOR MONITORING.
- DDLG APS IS USED IN 2 MODES VIZ. PACKET AND TRANSPARENT.

FEATURES & BENEFITS

- DDLG SI SERIES SUPPORT RS232 AND RS485 INTERFACE.
- DDLG SI IS USED IN PACKET AND TRANSPARENT MODES.
- DDLG SI NEEDS DDLG APS AS A RECEIVER TO CREATE COMMUNICATION CHANNEL.
- TYPICALLY, ONE RECEIVER GATEWAY CAN CONNECT UPTO 100 DDLG SI SERIES DEVICES.
- HIGH-POWERED INDUSTRIAL LORA CHIP AND MCU SUPPORT
- LOW POWER CONSUMPTION MODE, INCLUDING MULTI-SLEEP AND TRIGGER MODES TO REDUCE THE POWER DISSIPATION FARTHEST
- HOUSING: IRON, PROVIDING IP30 PROTECTION
- HIGH-POWERED INDUSTRIAL 32 BITS CPU POWER RANGE: DC 5~36V

TECHNICAL SPECIFICATIONS

LORA

Communication:	
LoRa Module	F8L10T
Frequency Band	867 MHz
Distance	Line-of-Sight Range: Up to 3.5km
Receiver Sensitivity	-139dBm at SF12
Transmit Output Power	20dBm
LoRa data rate	6 level (0.3, 0.6, 1.0, 1.8, 3.1, 5.5 Kbps)
Antenna connector	SMA female type, 3 dB standard Impedance of 50 ohms
Connection Modes	Point to Point, Star

HARDWARE

16 bits CPU	
Program Memory	128K bytes
SRAM	96K bytes
Watchdog	Built in H/W watchdog timer

RTU INTERFCAE

Serial port	RS-485(2 Wire), RS-232(3-Wire), Screw type connector
Data bits	8
Stop bits	1, 2
Parity	None, Even, Odd
Baud rate	2400 to 115200 bps
Termination Resistors	Built in

POWER

Power supply	24V DC, 1A (Voltage Range 5-36 VDC)
Connectors	3 pin Industrial Screw type Terminal block, 3.81mm
Power Consumption	< 0.8W @ 24V DC (No communication) < 1.2W @ 24VDC (During communication)
LED Indicators	Power, Online, Tx/Rx, Status

ENVIRONMENTAL

Operating Temperature	0 to +85°C
Storage Temperature	-10 to +85°C
Operating Humidity	95% (unfreezing)

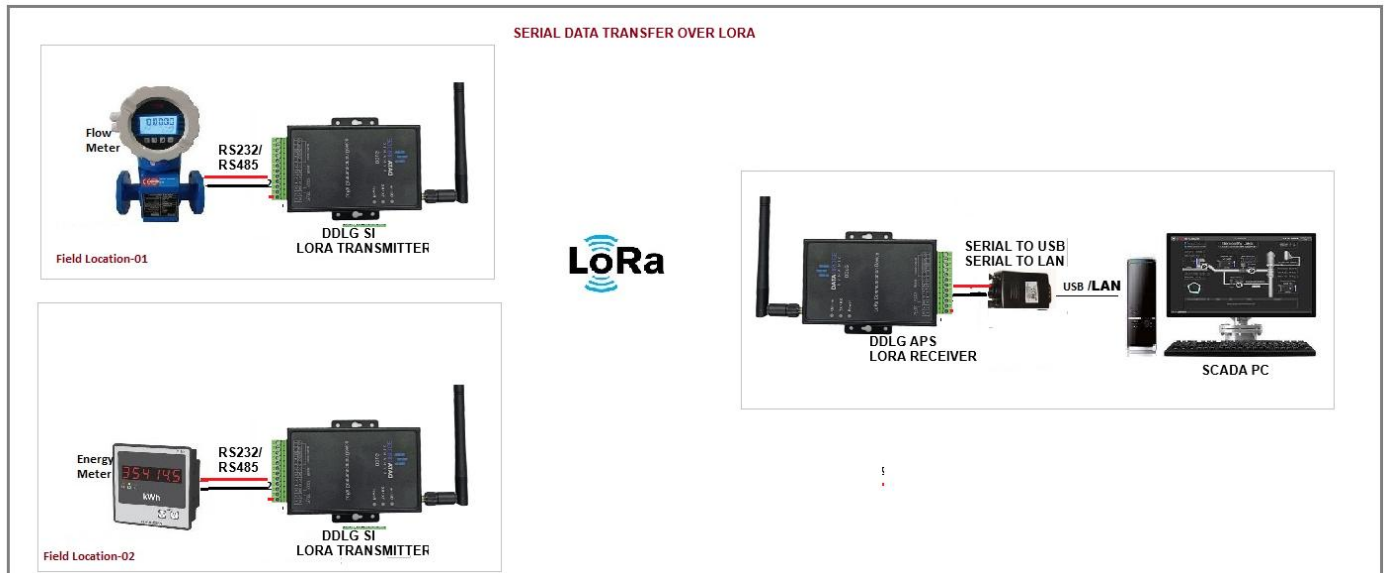
MECHANICAL

Enclosure	Metallic Enclosure with DIN rail and wall mounting
Dimensions	91 x 58.5 x 22 mm for enclosure (Excluding antenna)
Weight	205gm

ORDERING INFORMATION

Sr. No.	Ordering Code	Description
1	DDLG SI	LoRa device with Serial interface
2	DDLG APS	Access point LoRa unit with Serial interface

ARCHITECTURE



DATA BRIDGE
D Y N A M I C