

Power Options

Option C1: External Solar Panel Built in Controller & Li-Ion Rechargeable Battery Pack
(3.7VDC, 20000mAH), 5 year life (note 1)

Option C2: External Solar Panel Built in Controller & Li-Ion Rechargeable Battery Pack
(3.7VDC, 8000mAH) 2 year life (note 2)

Option C3: External Solar Panel Built in Controller & Li-Ion Rechargeable Battery Pack
(3.7VDC, 5000mAH) 1year life (note 3)

Enclosure Options

NTAIDI-MOD16 IP67 PolyCarbonate Waterproof Casing, 148x90x50 mm, 54 (h)x 134(v)mm mounting, 6mm dia.



Enclosure & Power Options

Application

NTAIDI-MOD16

- (a) water pump stations monitoring
- (b) weather stations – temperature, pressure and rain fall real time data logging & upload
- (c) Water pipes network – temperature, pressure, flow rate real time monitoring.
- (d) power station, power network, cable towers data logging
- (e) Environmental Sensor Interface logger.

Solar Power GPRS Data Logger

- * Built-in Solar Panel Controller
- * Internal 20 or 8 or 3Ah Li-ion Rechargeable Battery
- * Average 30 days operation by battery only
- * Direct connection to solar panel
- * Automatic switch to battery power when losing sunlight
- * Automatic recharge battery on sunlight
- * Low Power Sleep Mode < @10uA, 12VDC
- * Suitable for rural sites with adequate sunlight
- * IP67 Poly Carbonate waterproof crash proof enclosure
- * Poly Carbonate Casing, 148 x 90 x 50 mm
- * Solar Panel is not included In package



Weather Station Package Solar Powered GPRS Data Logger

- * Wind Direction / Speed Transducer
- * Temperature & Humidity Sensors
- * Rain Gauge Tip Bucket
- * CO2, Pressure, UV Transducer, Flow and Pressure Transmitter

GPRS Data Logger & Modbus Flow Meter



- * NTAIDI-MOD16 supports Modbus interface
- * It powers the flow meter with its internal voltage (12V DC)
- * Its internal battery support average 1-3 years' operation
- * Programmable 16 floating points / 16 integers registers mapping

Enclosure & Power Options



Examples of sensors measured by AD or Pulse channels:

- ◆ Wind Speed/Direction Transducer
- ◆ Rain Gauge, Ultrasonic Water Meter, Pressure Gauge, Water Level Transducer



How to Setup RTU Modem

NTAIDI-MOD16

Model Selection	5000mA	8000mA	20000mA
Poly Carbonate Waterproof	IP67	IP67	IP67
High Capacity Battery 20Ah	—	—	✓
8Ah Rechargeable Battery	—	✓	—
5Ah Rechargeable Battery	✓	—	—
Low Power Sleep Mode	✓	✓	✓
Low Voltage Alert	✓	✓	✓
Solar Panel Controller	✓	✓	✓
Built-in 12VDC output	✓		
AD Channel-1 (4-20mA)	1		
Pulse Channel	0		
Alarm Input (DI)	1		
Relay Output (DO)	0		
Modbus Device Support	16		
Modbus Interface	RS-485		
Modbus Meter support	ANY		
Floating Point Registers	16		
Integer Registers	16		
Temperature Sensor	0		
Humidity Sensor	0		
Internal Memory	512KB		
SMS Alarm Text	Data only		
Data Logging Interval	1 ~ 60 minutes, 2hours		
Data Upload Interval	5 minutes ~ 24 hours		
Data Upload	On Schedule		
IP Connection	N.A		
Protocol	CWT / TCP/ MQTT		
Data Transmission	4G Data		
PC Communication Port	USB		
SMS & GPRS Alarm	N.A		
Local Setup	USB – WEB BROWSER		
Remote Command	Support remote command via SMS or GPRS		
Cinterion GSM Module	MC55i Quad Band [850/900/1800/1900MHz]		
Bundled SoGware Free	Standard Edition		
Setup Software	Web Browser		
Centre SoGware	Data Receiving VSPE, RTU center,. 99 data loggers		
Optional SoGware	King View scada software		

How to setup

Remote setup via MQTT



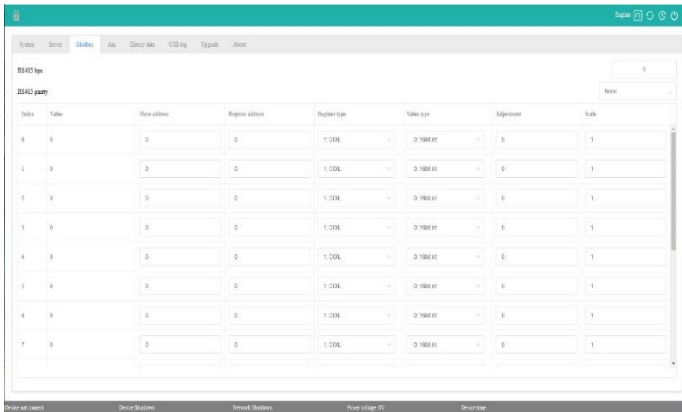
Local setup via USB



When will NTAIDI-MOD16 upload data?

- | | |
|--|---|
| <p>(a) On Schedule</p> <ul style="list-style-type: none"> ◆ Data is uploaded every interval via 4GLTE ◆ User Programmable upload interval ◆ Data records within the interval will be uploaded in packet | <p>(b) Manual Check</p> <ul style="list-style-type: none"> ◆ Query by user mobile phone MQTT ◆ Command from Server via MQTT when it is connected to network |
|--|---|

Optional Software Support



ID	Name	Node address	Register address	Register type	Value type	Adjustment	Scale
0		0	0	1.00K	0.00000	0	1
1		0	0	1.00K	0.00000	0	1
2		0	0	1.00K	0.00000	0	1
3		0	0	1.00K	0.00000	0	1
4		0	0	1.00K	0.00000	0	1
5		0	0	1.00K	0.00000	0	1
6		0	0	1.00K	0.00000	0	1
7		0	0	1.00K	0.00000	0	1

Ultimate Server Software

- ◆ Receiving data via USB / MQTT remotely
- ◆ Display of live data and devices status in real time
- ◆ Maintaining the record database in xml files
- ◆ Maintaining the database of 4G LTE data loggers identities and properties
- ◆ Display status of server, data loggers and clients
- ◆ Interface for user development and application
- ◆ Client software support
- ◆ Support of integrating with:
Access / MySQL / SQL / Oracle Databases

Ultimate Client Software

- ◆ Downloading live or historical data from Server
- ◆ Real time monitoring of a number of data loggers
- ◆ Alert users when temperature/humidity is too high/low
- ◆ Data trend review
- ◆ Web based Client
- ◆ Wind Speed Direction Graphics

