

LEVEL GAUGING SYSTEM Model MECH LGS

Applications

- Measurements of Water level of Reservoirs, Barrages, MI Tanks, Rivers, Canals, ESR's /GSR's
- Target Cliental: WRD, IMD, CWC, Agriculture, Irrigation, Municipal Corporations, Tropical metrology etc.

Features

- Microprocessor / Micro-controller based solid state controller.
- Self-Reporting at predefined time interval
- Selectable Station ID
- Local Data Storage for one year with Data retrieval facility
- Programmable Data Storage interval from 1.00 min to 24.00 Hrs.
- Local Display facility using VGA graphics LCD display
- Two RS-232 ports, One RS-485 port, One SDI-12 port, One Ethernet Port & Two USB ports
- Long range data Transmission--- Using VHF / UHF / GSM / GPRS / VSAT / INSAT/GOES / Lease Line networks
- Easy to Read & Calibrate
- Auto Reset facility after one year
- Improved accuracy
- Input power voltage 12-19 V Solar power supply
- GPS Receiver (Optional)
- Remote Programmable



Description

This unit is designed for collection, storage and transmission of Water Levels from remote Stations to control room.

Water Levels are continuously displayed.

Operate in harsh environment. Local data is stored for one year on predefined time period with facility for local retrieval of data

It powered with 12 VDC Hybrid (mains & Solar) power source.

Programmable data storage and data transmission interval

Data retrieval facility using USB/SD cards

Having facility to add mobile numbers for data dissemination over GSM network



Specifications

Input Power:	Charger input	12-20 VDC Solar
Solar Panel:	As required	30/40/50/... 100 watt

Battery:	Type	SMF (Not included)
	Support Cap.	20-180 A-h.
	Protections	Reverse polarity connection
	Battery U/V	Automatic load Disconnect
	Connection	Screw clamp wire terminal
	Wire size	28-14 AWG

Charging Rate:	20-180 A-h cap.	Regulated to 4A.
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Display	Monochrome, graphics Language	for local data display English
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I/O lines:

D/I	08 optically isolated
D/O	08 optically isolated
A/I	04 transient protected
A/O	01 transient protected

Communication:	Serial Port	RS-232 – 2 Nos RS-485 – 1 No SDI-12 – 1 No
	USB Host	USB Port – 1 No.
	USB Device	USB Port – 1 No.
	Ethernet (Optional)*	10/100 Base T – 1 No.

Data Transfer Rate:	RS-232	115200 bps
	SDI 12	1200 bps

Memory:

Program Memory	256 KB Flash	Internal
Storage Memory:	4 MB Flash	Expandable to 8 MB
Removable Memory	16 GB Flash	SD card/ USB Host

GPS (Optional)*

Frequency	1.57 Ghz.
Antenna	Passive
Format	NMEA-0183 format
Acquisition sensitivity	-160 dBm
Tracking sensitivity	-160 dBm
Time PPS	+ 61 ns

Acquisition time:

Hot Start	> 01 Sec
Warm Start	> 35 Sec
Cold Start	> 35 Sec

Mechanical:

Finish (Color)	RAL 7032
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Environmental:	Temperature	-20° to 60° C
	Relative Humidity	0 to 100 %.

Protection	Enclosure	IP 65
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Sensor Type	Range	Resolution	Accuracy
Radar	0-100 Mtr.	1 mm/ 0.03% of full range	≤ 3%
Ultrasonic	0-15 Mtr.	1 cm	± 0.25%
Hydrostatic Pressure	0-70 Mtr.	1 mm	0.2%
Shaft Encoder	0-100 Mtr.	1 mm	1 mm
Bubbler	0-70 Mtr.	1 mm	0.02 FSO%

Note:

- 1) Sensors with higher accuracy will be provided if required (**Optional**)
- 2) Solar Panel & Batt. capacity will be selected as per power requirement at site

Ordering Information

Model No.	Description
MECH_LGS_RD	Level Gauging System Radar
MECH_LGS_SE	Level Gauging System Shaft Encoder
MECH_LGS_BB	Level Gauging System Bubbler
MECH_LGS_UL	Level Gauging System Ultrasonic
MECH_LGS_HP	Level Gauging System Hydrostatic Pressure



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