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Product improvement is a continuous process. For the latest information and special applications, please contact any of our offices listed here.



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## L&T MU-G SOLAR PUMP CONTROLLER

Because Nature has the best technology



## L&T MU-G SOLAR PUMP CONTROLLER

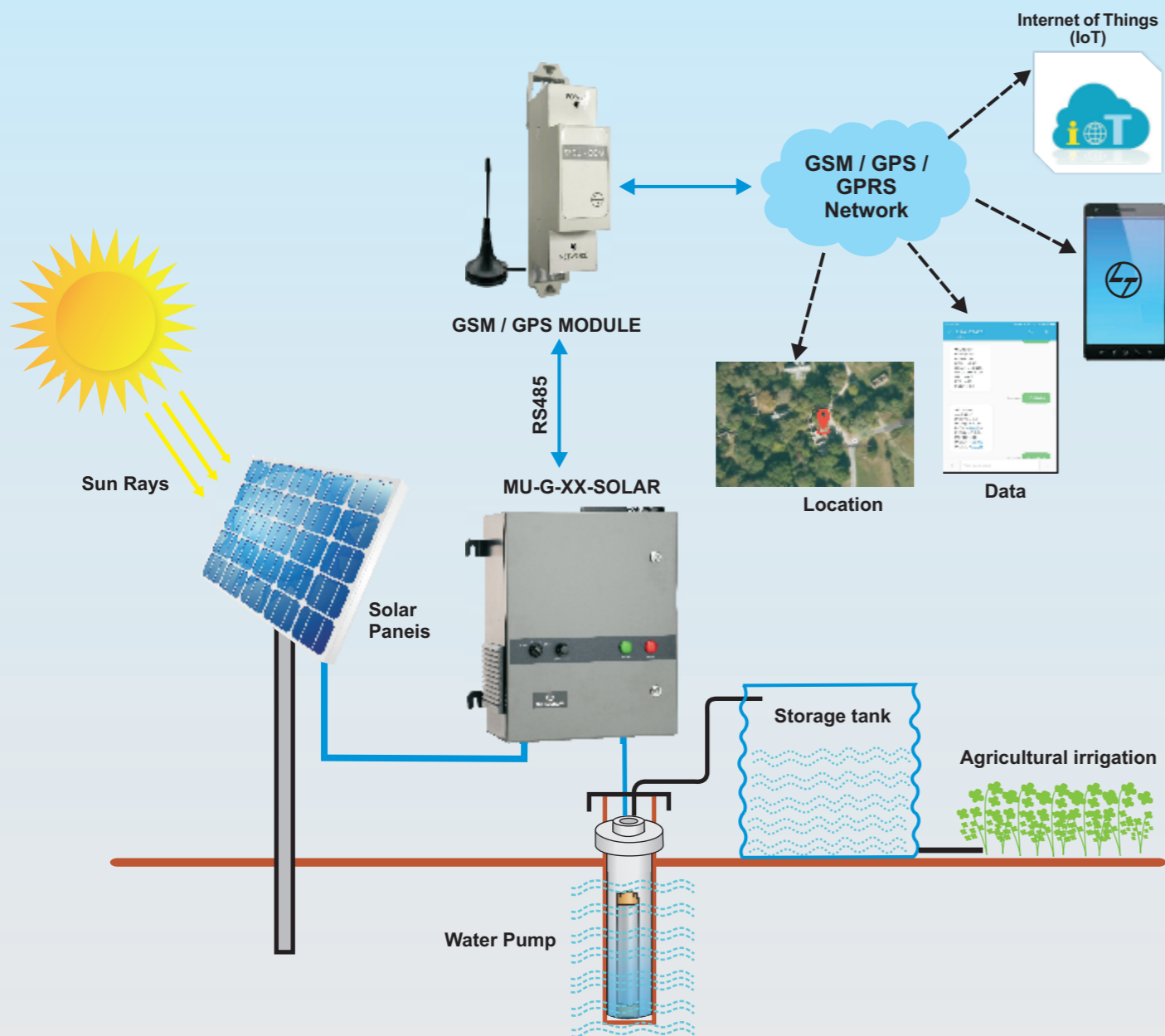
Because Nature has the best technology

L&T Solar Pump Controller enables effective use of Solar energy for providing long term economic solution. Solar energy is the appropriate alternate solution to provide water to people and far distant farm lands where grid connectivity is either absent or irregular.

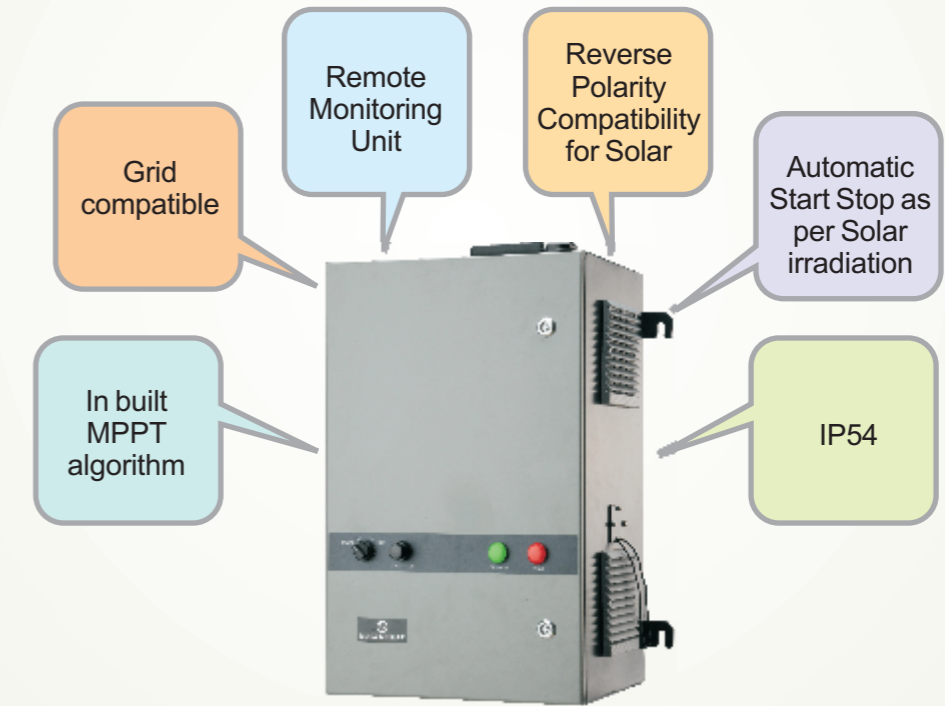
L&T MU-G Solar Pump Controller is designed to run 3HP to 10HP Three Phase Submersible and monoblock Pump/Motor for all applications like Irrigation, water supply, farms, tank filling, industrial etc. In absence of solar power, the L&T MU-G Solar Pump Controller can be manually switched to a 3-Phase AC supply or connected to grid.

With Maximum Power Point Tracking (MPPT) Technology, L&T Solar Pump Controller ensures the extraction of maximum power from the PV panel to deliver maximum water at various solar energy level for maximum duration in a day. L&T Solar Pump Controller ensures that you take part in the effective use of Solar energy to have a shining and growing life based on the one and only Sun, we have.

## SOLAR PUMP CONTROLLER



## FEATURES :



## BENEFITS :

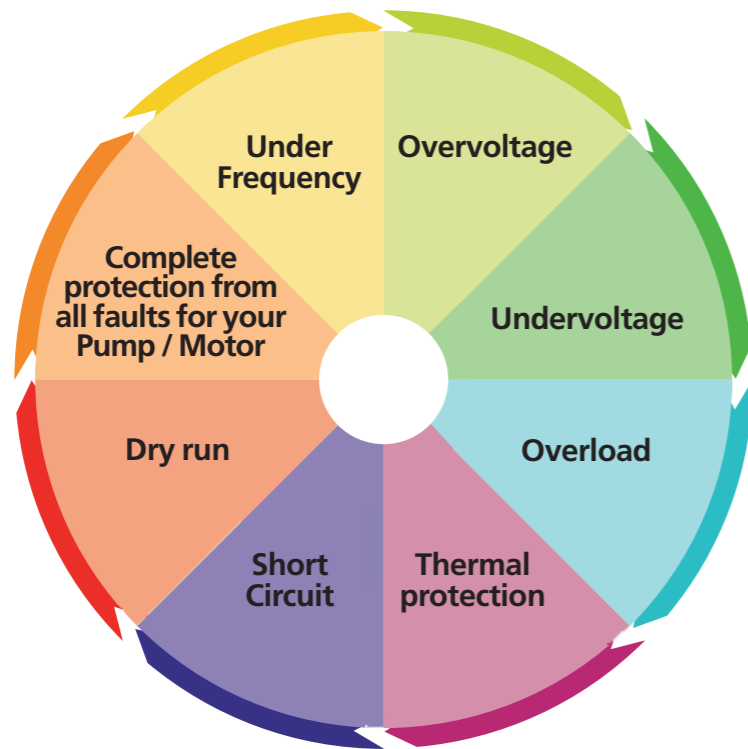
MPPT:	Increased life of motor:	Easy Installation & Low Maintenance:
With Maximum Power Point Tracking (MPPT) Technology, L&T Solar Pump Controller ensures the extraction of maximum power from the PV panel to deliver maximum water at various solar energy level for maximum duration in a day	Increased life of motor: Soft start features to prevent water hammering and to increase system life	Factory prewired panel ensures easy installation and less maintenance

## CONVENIENT OPERATION:

- The L&T Solar Pump Controller comes with Remote Monitoring Unit (RMU), so that from anywhere anytime it can be operated and all operational parameters can be set and monitored through mobile
- Query based event feedback on mobile
- The L&T Solar Pump Controller can be operated through Android App for easy interface and operation
- GPS ensures the exact location information for panel monitoring and IOT Based application
- GPRS Technology ensures the operational parameters on the server to monitor and analyse (on your mobile/PC/Laptop)

## PROTECTION:

Complete protection from all faults for your Pump / Motor



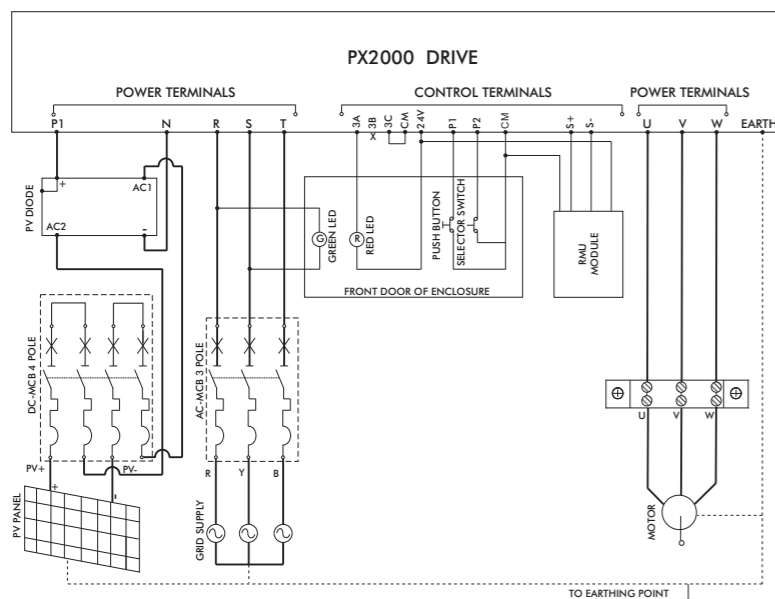
## FRAME 1 L&T SOLAR PUMP CONTROLLER



## Certification as defined by MNRE

Standard	Description
IEC61683	Efficiency Test
IEC60068-2-1	Cold Test
IEC60068-2-2	Dry Heat Test
IEC60068-2-14	Change Of Temperature
IEC60068-2-30	Damp Heat Test
IEC60529	IP54
IEC62262	IK06

## Product Architecture



- PV+, PV : Solar i/p terminals
- RYB : I/P Grid terminals
- UVW : O/P Pump terminals
- RMU Module : Remote monitoring unit
- Push button : START / STOP Pump
- Selector Switch : Solar / Grid selection
- Red LED : Fault
- Green Led : Grid ON

## FEAME 2 L&T SOLAR PUMP CONTROLLER



# L&T SOLAR PUMP CONTROLLER

## Technical Specification

<b>Rating</b>	3HP to 10HP
<b>Rated Output Voltage</b>	400V class
<b>Pump</b>	3ø Induction Motor-400V Class
<b>Technology</b>	MPPT based frequency control
<b>Indicating Lamps</b>	LED FOR FAULT/GRID ON
<b>Indicating Lamp Type</b>	24V-RED-FAULT/400V-GREEN-GRID ON
<b>System Efficiency</b>	>97%
<b>Cooling</b>	Air cooling
<b>Dimension</b>	Frame-1(WxHxD) (3-5 HP) 400 x 500 x 200
	Frame-2(WxHxD) (7.5-10 HP) 400 x 625 x 300
<b>Features</b>	MPPT Functionality For Pump Speed Control 7 Segment LED Display Add-On Remote Monitoring Unit Grid Interface Automatic Start/Stop With Solar Irradiation Reverse Polarity GPS Tracking GPRS Server compatibility Android App Remote operation and monitoring (All operational parameters) through Mobile (ON/OFF, All parameter settings), Query based event feedback
<b>Solar Pump Controller Output</b>	
<b>Phase</b>	3ø
<b>Voltage</b>	400V class
<b>Frequency</b>	50/60 Hz
<b>PV Input</b>	
<b>DC Input Voltage Range</b>	220V - 800VDC
<b>MPPT Range</b>	450 - 700V
<b>Total Watts of solar Panel</b>	As per MNRE specifications
<b>AC Input/Grid Input</b>	
<b>Phase</b>	3ø
<b>Mains Input Voltage Range</b>	380V - 480V ± 15%,
<b>Input Frequency</b>	50/60 Hz
<b>Protection</b>	
<b>Protection</b>	Dry Run
	Thermal Protection
	Over Voltage
	Under Voltage
	Inverter Over Load
	Under Frequency
	Reverse Polarity
<b>DC Link/ PV Over voltage</b>	820V
<b>DC Link/ PV under voltage</b>	220V
<b>Environment Parameters</b>	
<b>Cooling System</b>	Air cooling
<b>Impact Capacity</b>	IK06
<b>Degree of Protection</b>	IP54
<b>Operating Temperature</b>	-10°C TO 50°C
<b>Termination Capacity</b>	
<b>Solar/Grid: Bare Cables</b>	35 sq. mm (RIGID)
	25 sq. mm (FLEXIBLE)
<b>Motor: Bare Cables</b>	16 sq. mm
<b>Lug</b>	Max. Lug Width 12 mm
<b>Drive</b>	
<b>Name</b>	Px2000
<b>Cooling</b>	Forced cooling
<b>Degree of Protection</b>	IP20
<b>MCB</b>	
<b>MCB</b>	Ampere rating as in the table (For PV) Ampere rating as in the table (For GRID)
<b>MCB Rated Current</b>	As per Table
<b>MCB Rated Short Circuit Breaking Capacity</b>	10KA

## System rating

MOTOR RATING 3Ø,415V,50Hz (HP)	MOTOR RATING 3Ø,415V,50Hz (kW)	FULL LOAD CURRENT (A)	MCB RATING GRID 3POLE AC 415V,50Hz (A)	MCB RATING SOLAR 4POLE DC, 10kA (A)
3	2.2	5.5	16	16
5	3.7	8	20	16
7.5	5.5	12	25	20
10	7.5	16	32	25

## Ordering Catalogue Numbers

CAT NOS.	DESCRIPTION	RATING
CS91463PT10	SOLAR PUMP CONTROLLER 3HP WITH RMU	3HP
CS91463PO10	SOLAR PUMP CONTROLLER 3HP WITHOUT RMU	3HP
CS91464PT10	SOLAR PUMP CONTROLLER 5HP WITH RMU	5HP
CS91464PO10	SOLAR PUMP CONTROLLER 5HP WITHOUT RMU	5HP
CS91465PT10	SOLAR PUMP CONTROLLER 7.5HP WITH RMU	7.5HP
CS91465PO10	SOLAR PUMP CONTROLLER 7.5HP WITHOUT RMU	7.5HP
CS91466PT10	SOLAR PUMP CONTROLLER 10HP WITH RMU	10HP
CS91466PO10	SOLAR PUMP CONTROLLER 10HP WITHOUT RMU	10HP

## Dimension and mounting details:

