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Product improvement is a continuous process. For the latest information and special application, please contact any of our offices listed here. Product photographs shown for representative purpose only.



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MU-GiA Multi-Motor Controller Empowering Reliability with Integrated Smart Solution



MU-GiA Multi-Motor Controller

MU-GiA Multi-motor controller is an integrated solution enabling operation, control and protection for motor and pump application. User can run upto 4 motor-applications with single MU-GiA Multi-motor controller, thus reducing the hassle of wiring, operation set-up and parameter settings. MU-GiA Multi-motor controller provides a single factory fitted set-up solution for multiple motor application. With Add-on Sub-1GHz module, MU-GiA controller can be connected to cloud based SMARTCOMM IMS. With these Add-on Sub-1GHz modules and SMARTCOMM IMS, multiple such MU-GiA controllers can be connected to operate as complete solutions for different applications providing Web or Mobile based central and remote monitoring and operation-control.

Cloud Connectivity through Sub-1GHz add-on Module

Timers & Program Scheduling

Quick Bypass using Rocker Switch

Individual Motor Control

Modular Architecture allows fast and easy service

Provides Isolation due to in-built Isolator

Corrosion Resistant and also Suitable for Outdoor Application



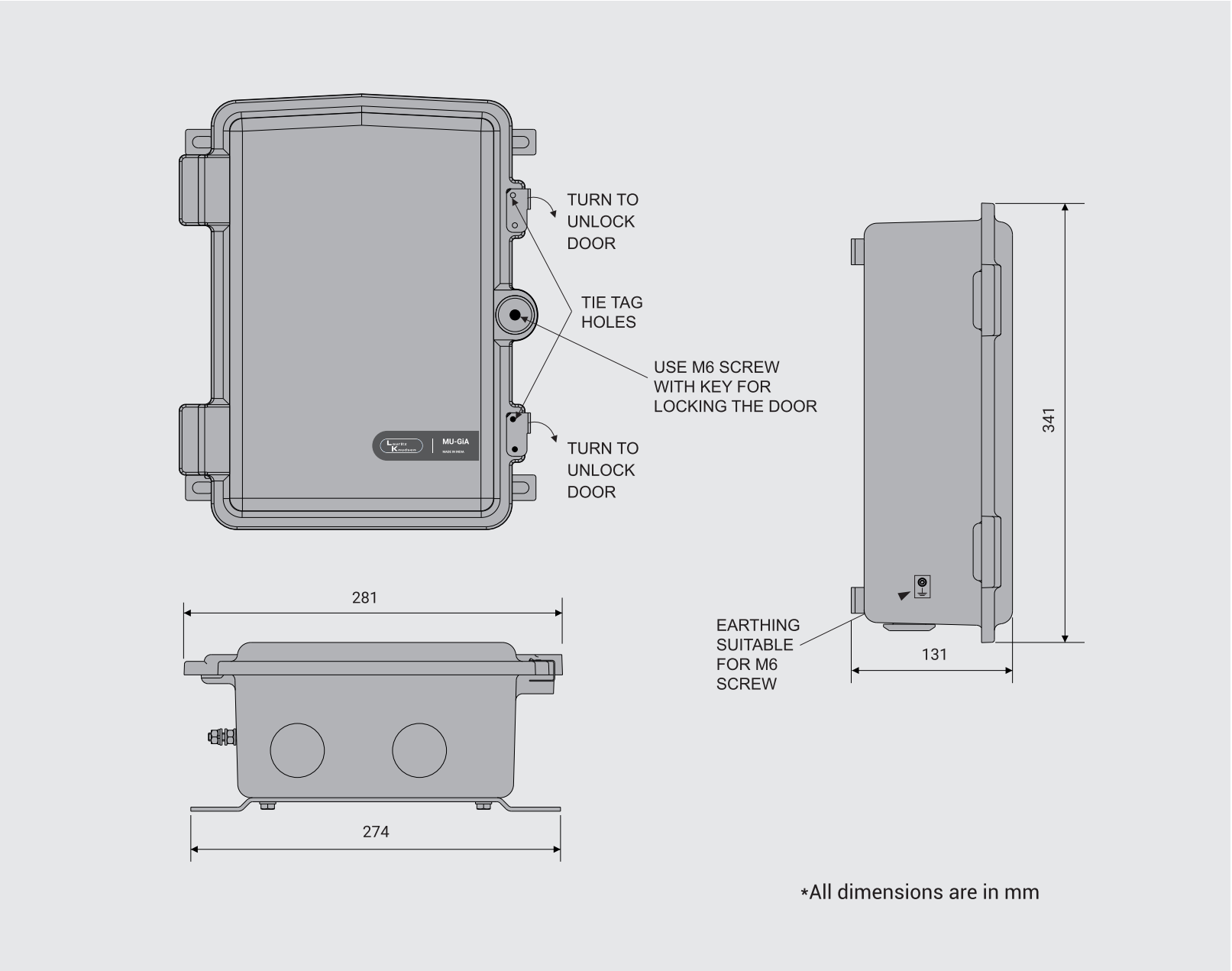


MU-GiA
MADE IN INDIA

MU-GiA Multi-Motor Controller

Dimensions

1-Motor Controller

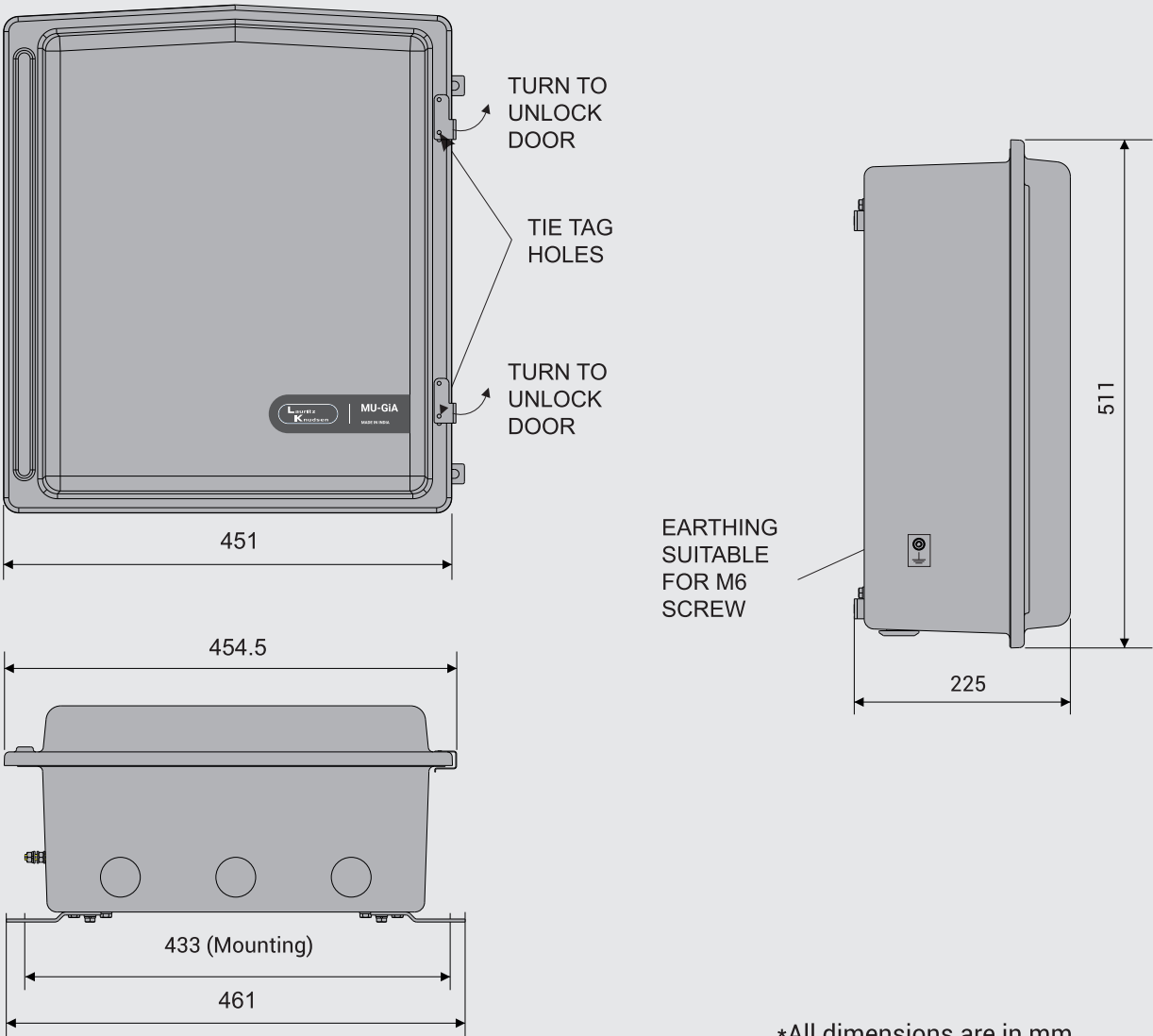


Termination Capacity

	Bare Cables	Lug Termination			Tightening Torque
		Lug Type	Cross Section	Max. Palm Width	
Supply side	25 sq.mm	Fork type	35 sq.mm	12 mm	2.0 Nm
Motor side	10 sq.mm	Ring type	16 sq.mm	12 mm	1.4 Nm

Dimensions

4-Motor/2-Motor Controller



*All dimensions are in mm

Termination Capacity

	Bare Cables	Lug Termination (Ring type)		Tightening Torque
		Cross Section	Max. Palm Width	
Supply side	10 sq.mm	16 sq.mm	12 mm	1.4 Nm
Motor side	6 sq.mm	10 sq.mm	10 mm	1.4 Nm

Features & Benefits



Individual Motor Control

- › Due to its individual motor feeder-based design, each motor connected to the controller can be operated separately. If one of the motor needs maintenance, it can be isolated and repaired without affecting the operation of the other motors. This ensures continuous operation and minimizes downtime, enhancing overall efficiency.



Multiple Modes of Operation

- › Auto, Manual, and Bypass Modes of Operation:
 - Auto Mode: Motors will be turned ON/OFF automatically based on the selected timer operation.
 - Manual Mode: Users must start the motors manually by pressing the ON button.
 - Bypass Mode: All protections will be bypassed, and faults will not be detected. The unit will operate in ON/OFF condition based on user input. (This mode to be used at the user's discretion only.)

Note: The motor will only start after a power-on delay time. Power on-delay timer is configurable with a range of 0.1-20 Minutes.



Timer for Auto Operation

- › In the MU-GiA, three types of timers are available. Timers can be enabled in the auto mode only.
 1. Auto OFF timer: Users set the duration for which they want to operate the motor. Once the timer elapses, the motor will be turned off automatically, manual intervention is not required.
 2. Cyclic Timer: User sets ON and OFF time of motor, and as per the set time it will ensure continuous ON & OFF in periodic cycle till it is manually turned OFF or timer is reset. Up to four different cyclic timers can be set by user.
 3. RTC Timer: It is Real-Time Clock (RTC) timer. User can set up to 4 different RTC timers. User needs to set the ON & OFF time of the motor in HH:MM format.
- › Auto OFF and Cyclic timers come with time compensation feature. In the case of a power failure, the timer will compensate for the lost time by operating the motors for an additional duration equal to the time that was lost during the power outage.



Remote Monitoring and Control

- › MU-GiA can be connected to the cloud SMARTCOMM IMS using Add-on Sub-1GHz module and 4G Gateway for remote monitoring and control.

Features & Benefits



Robust Design

- › IP55 SMC Enclosure
- › Corrosion Resistance
- › 6kV Impulse Withstand



Ease of Operation & Maintenance

- › Isolator for system isolation.
- › Modular Architecture for easy and fast service.
- › Individual Motor Control System allows each motor to be monitored individually; in case of a fault, the affected motor can be isolated and reworked.
- › Rocker Switch to select mode of operation (auto/manual).
- › Separate Rocker Switch for quick bypass.
- › Individual Motor ON/OFF Switch for selective operation.
- › Terminal Blocks for easy termination.



Multiple Mounting Options

- › Pole & Wall Mounting for easy installation.

The MU-GiA controller comprises an in-built system that ensures optimal functionality

Digital Controller

MCB

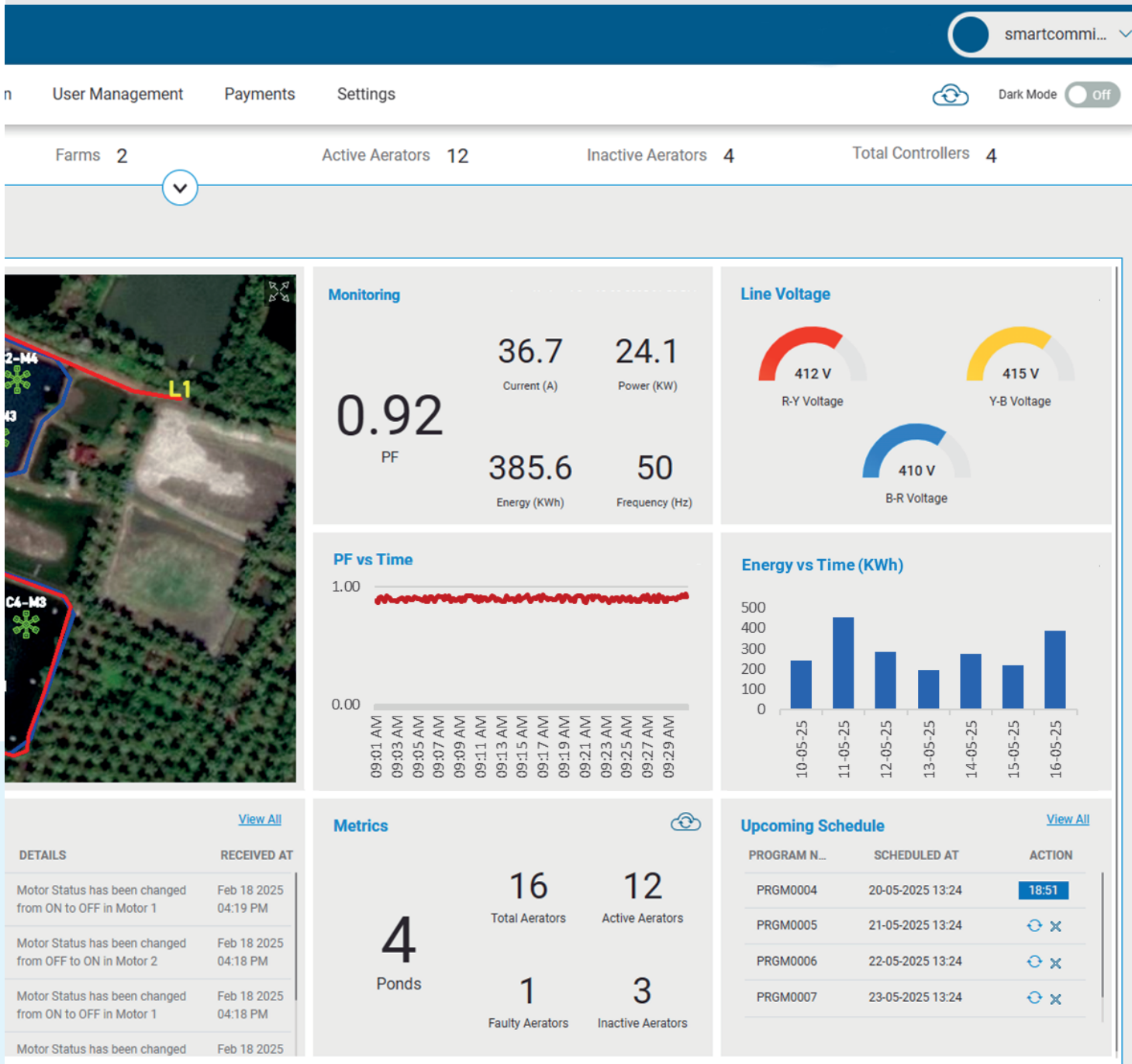
Contactor

Isolator



Add-on

Sub-1GHz Module



Graphs and Reports



Mobile and Web Based Application



Alerts and Notifications

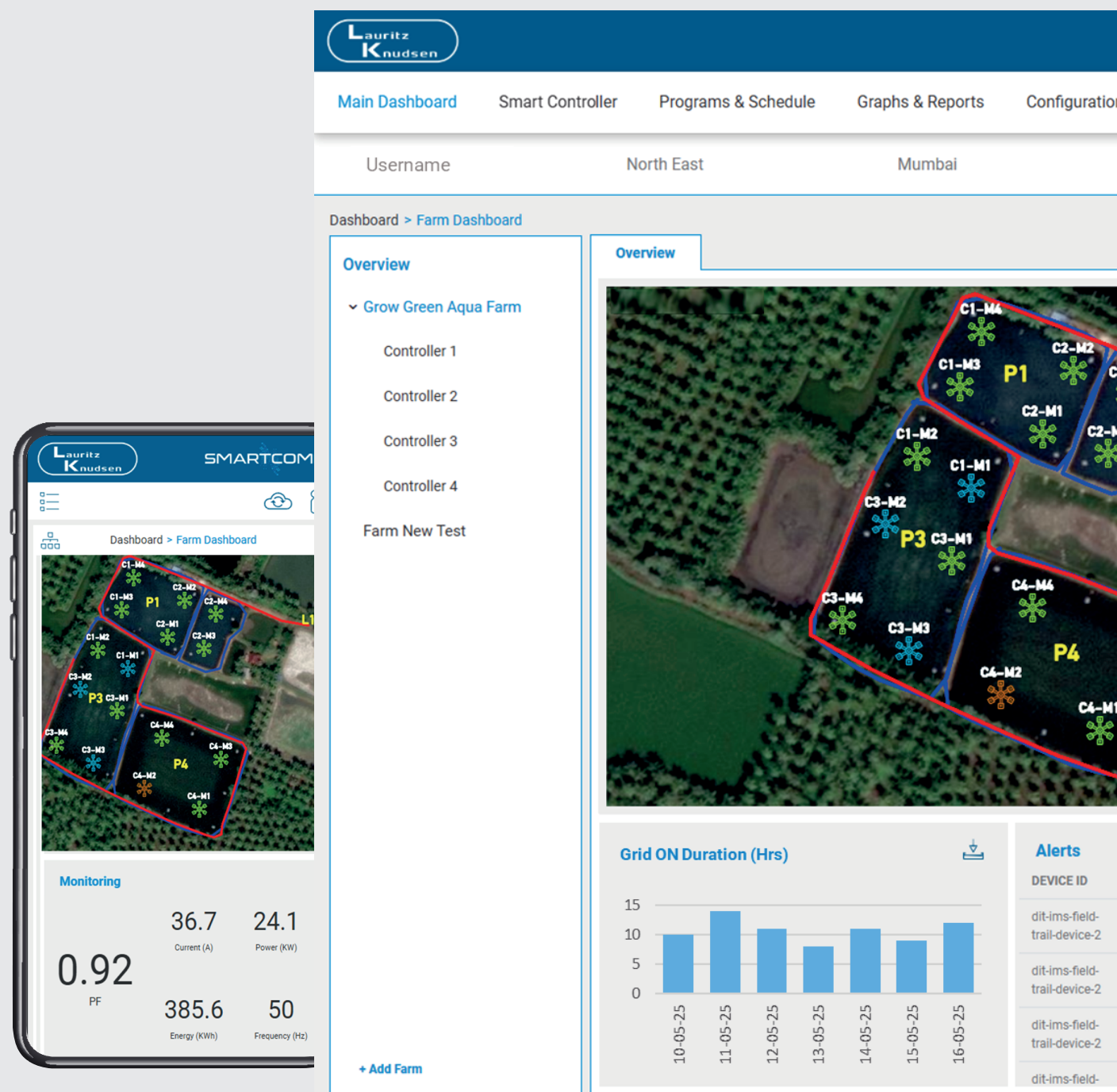


Programming and Scheduling



Role Based Access Control

SMARTCOMM IMS



*These visual representations are for illustrative purposes only.



Remote Monitoring



Overview of Total Farm

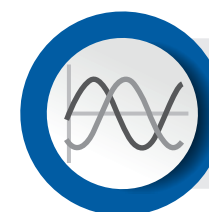


Remote Control

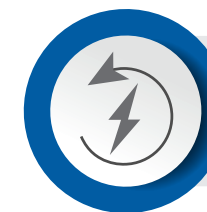


Multi-Lingual Support

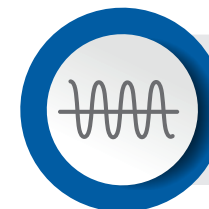
Protections



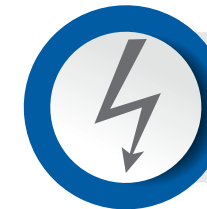
Phase Failure /
Single Phasing



Overvoltage



Phase Reversal



Undervoltage



Voltage & Current
Unbalance



Short Circuit



Overload



Dry Run:
for single motor variant only



Note: For more details, please refer product insert.

Product Range



4-Motor/2-Motor Controller

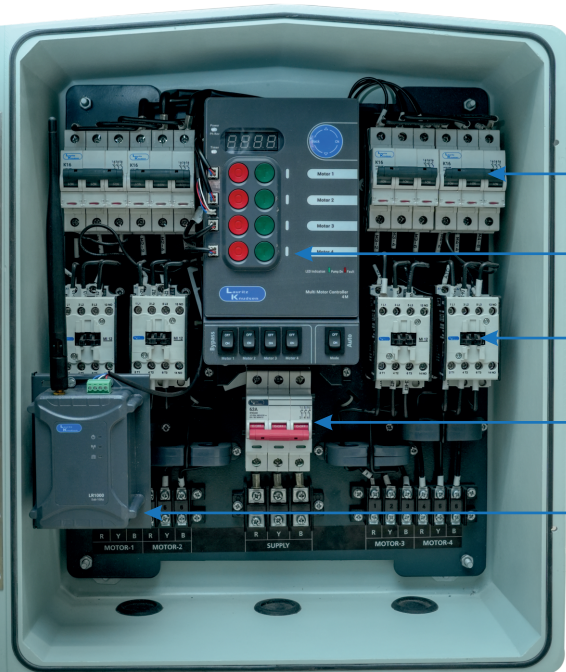


1-Motor Controller

Variant	Maximum Rating (HP)	Load Current (A)	Cat. No.
4-Motor Controller	3	0.7-12	CS92082DOLO
2-Motor Controller	3	0.7-12	CS92083DOLO
1-Motor Controller	7.5	1.5-22	CS92084DODO

*1-Motor Controller can be used with submersible pumps up to 7.5 HP.

Interior View of Multi-Motor Controller



- K-Curve MCB
- Digital Controller
- Contactor
- Isolator
- Add-on: Sub-1GHz Module



Communication with Multi-Motor Controller

