

RCU HYBRID

Advanced electronic control unit designed for automatic rainwater harvesting and water management systems

It controls two tanks, one for rainwater and one for breaktank, automatically selecting the water source



MAIN FEATURES

- Automatic filling of the breaktank with 1 or 2 load pumps installed in the rainwater tank depending on water level conditions
- Continuous monitoring the level of rainwater tank via 4–20mA analog level sensor
- Continuous monitoring the level of break tank via 4–20mA analog level sensor
- Load pump management with current monitoring and power control relay
- Load pumps functionality : duty standby or duty assist
- Output for solenoid valve potable water 230V/AC
- Automatic filter cleaning cycles with programmable ON/OFF timing and maintenance intervals
- Integrated alarm management for overflow, dry run, low rainwater level, and load pump malfunction
- Audible buzzer alarm and external alarm relay output for remote notifications
- User-selectable multilingual interface with protected installation and factory settings
- Prepared for future Bluetooth and Wi-Fi connectivity expansion
- Manual operation mode for maintenance and commissioning activities with access code
- Configurable level sensor thresholds and maintenance intervals directly from the touchscreen interface
- Electrical connection of 1 or 2 watermeters

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HYBRID RCU

Technical Data

- Power supply: single phase 90–240 VAC/50 Hz
- Integrated RTC with backup battery for scheduled operations
- Integrated onboard alarm buzzer
- 2 Inputs for 4–20mA level sensor (Rainwater & break tank)
- 2 potential free relay outputs rated up to 12A
- LCD display with 2 rows from each 16 digits
- RS485 communication interface for future integration with supervisory systems
- IP55 protection rating (indoor installation)
- Plastic enclosure dimensions: 190 × 150 × 72 mm
- Removable terminal block for inputs



Alarms & Protection Functions

- Continuous monitoring of system operating conditions with automatic alarm management
- Visual alarm indication directly on the LCD display
- Integrated acoustic buzzer for immediate fault notification
- External NO alarm relay output for remote alarm signaling
- Automatic alarm reset when fault conditions are cleared

Available Alarm function

- Breaktank Overflow Alarm activated when the potable water tank reaches overflow condition
- Breaktank Empty / Dry Run Alarm prevents the booster pump from operating when the breaktank is empty
- Rainwater Low Level Warning
- Indicates insufficient rainwater level inside the storage tank
- Load Pump Malfunction Alarm
- Detects abnormal operation or failure of the auxiliary submersible pump
- Scheduled Maintenance Notifications
- Alerts for filter cleaning and breaktank refresh cycles
- Real-Time Alarm Display
- Dedicated alarm screen showing active fault conditions and system status