

OZTRON

MMCS

MICROGRID MANAGEMENT & CONTROL SYSTEM

One controller. Whole-of-system management.

A standardised, configurable platform

Oztron MMCS coordinates battery storage, renewable generation, generators, grid connections and controllable loads as one integrated energy system.

Designed for grid-connected, islanded and hybrid microgrids, MMCS combines local supervisory control, energy management, monitoring and remote operations in a single equipment-agnostic platform.

STANDARD CORE

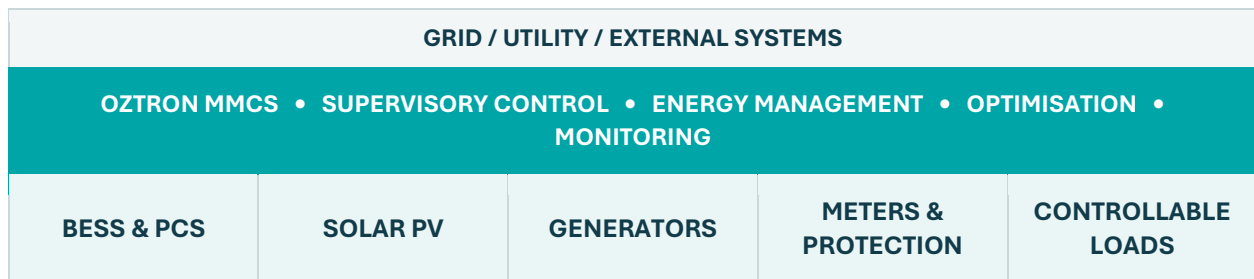
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CONFIGURABLE MODULES

Configured to the site, assets and operating objectives

WHOLE-OF-SYSTEM CONTROL

MMCS operates above device-level controllers, coordinating the complete site according to a common operating strategy.



CORE FUNCTIONS

CONTROL & RESILIENCE

- Coordinate PV, BESS, generators and grid supply
- Manage active/reactive power, reserves and equipment limits
- Support grid-connected, islanded and controlled transition sequences

ENERGY MANAGEMENT

- Manage battery State of Charge and dispatch
- Reduce demand peaks and generator fuel use
- Maximise renewable utilisation and enable tariff optimisation

MONITORING & OPERATIONS

- Live site status, energy flows, alarms and events
- Historical trends, reporting and remote diagnostics
- Interfaces to SCADA, DERMS, cloud and external systems

CONFIGURE. INTEGRATE. OPTIMISE.

A platform that grows with the microgrid

MMCS combines a repeatable core with application modules selected and configured for the project. This provides a consistent control foundation without constraining equipment choice or future capability.

BUILT FOR MULTI-VENDOR SYSTEMS

TYPICAL CONNECTED ASSETS

Battery systems • BMS • bidirectional PCS • hybrid and PV inverters • diesel/gas generators • meters • protection relays • switchgear • controllable loads • EV charging • plant sensors

TYPICAL INTERFACES

Ethernet • Modbus TCP/RTU • RS485 • CAN • manufacturer-specific protocols, subject to connected-equipment capability

CONFIGURABLE PLATFORM

MMCS CORE

Communications, supervisory control, power management, alarms and data management.

MICROGRID CONTROL

Resource coordination, reserve management, generator control and operating sequences.

ISLANDING & RESILIENCE

Islanding, synchronisation, black start and priority load management where required.

BATTERY OPTIMISATION

SoC control, peak shaving, solar shifting and cost optimisation.

REMOTE OPERATIONS

Monitoring, alarms, dashboards, reporting and remote support.

GRID / DERMS INTERFACE

Utility commands, telemetry, export control and external constraints.

ENERGY & MARKET OPTIMISATION

Tariff- and market-responsive dispatch where applicable.

FUTURE EXPANSION

Additional assets, sites and strategies can be introduced as requirements evolve.

CONFIGURED FOR THE APPLICATION

Equipment and communication interfaces
Electrical architecture and operating modes
Control parameters, limits and sequences
Protection interlocks and load priorities

Battery and energy-management strategies
Dashboards, alarms and reporting
Utility, SCADA, DERMS or market interfaces
Commissioning and remote-support requirements

APPLICATIONS & BENEFITS

Flexible by design. Consistent at the core.

TYPICAL APPLICATIONS

COMMERCIAL & INDUSTRIAL

Solar and battery systems, industrial facilities, embedded networks and demand optimisation.

MINING & REMOTE

Solar-BESS-diesel microgrids, weak-grid sites, fuel reduction and critical-load management.

COMMUNITY & REGIONAL

High-renewable and islandable networks,

ENERGY PRECINCTS

Multi-building systems, flexible loads, EV

community batteries and DER coordination.

charging and aggregator or VPP interfaces.

KEY BENEFITS

EQUIPMENT AGNOSTIC

Integrate assets from multiple manufacturers.

MODULAR & SCALABLE

Deploy required capabilities now and expand later.

LOCAL AUTONOMY

Critical control remains at site level.

REMOTE VISIBILITY

Centralised monitoring, diagnostics and support.

OPTIMISATION READY

Progress from basic control to tariff and market strategies.

ENGINEERING INTEGRATED

Coordinate controls, protection, grid integration and commissioning.

ENGINEERING THE INTELLIGENCE BEHIND DISTRIBUTED ENERGY.

Talk to Oztron about the operating objectives and integration needs of your next microgrid.

oztronenergy.com