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

+

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.

GRID / UTILITY / EXTERNAL SYSTEMS				
OZTRON MMCS • SUPERVISORY CONTROL • ENERGY MANAGEMENT • OPTIMISATION • MONITORING				
BESS & PCS	SOLAR PV	GENERATORS	METERS & PROTECTION	CONTROLLABLE LOADS

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