

# APEX

## Microgrid Controller Family

### Datasheet

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The APEX MCS G2 Microgrid family of controllers are designed for use in demanding on and offgrid power management applications. They are designed to manage and control the elements of a microgrid according to the site requirements, grid rules and available power sources. They can move between modes while in operation - optimized for backup today, PV self consumption tomorrow and tariff arbitrage after that.

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Microgrid control for medium and large commercial applications.

- Ideal for on or off-grid applications.
- Various models available, according to features and plant size.
- Monitor and control your plant on the webpage or the internet portal on any compatible browser.
- Manage power flow between loads, diesel generators, grid-tied PV inverters, PCSs and batteries, grid, manage time of use, power quality and device emulation.
- Flexible hardware that can easily be configured to measure / control at any point within the distribution network.
- Flexible third-party device communication over Modbus TCP or Modbus RS485.

## SPECIFICATIONS

Parameter	Value
Dimensions	150 (l) x 125 (w) x 60 (h)
Mounting Method	Din & Keyhole
Power Supply	230Vac 50Hz & 12-19Vdc
Signal Inputs	3 x Vac (330Vac Max.) 3 x Iac (5.8Aac Max.)
Digital Inputs	2 Inputs
Digital Outputs	2 Outputs • Rated switching current: 5A (NO) / 3A (NC) • Rated switching voltage: 250 Vac / 30 Vdc
Comms	TCP/IP over Ethernet Modbus over RS485
Remote Monitoring and Control	Via APEX Fleet Portal

## ORDER INFORMATION

### HARDWARE

SKU Code	Device	Comment	Compatibility
FG-MG-G2	MCS-G2 Hardware device	Hardware only (please add licenses)	Various meters, Deepsea genset controllers, Huawei, Ingeteam, Sungrow, Fronius, Solis, Goodwe, Meteocontrol, SMA, ATESS PCS, DEYE Hybrid inverters.**
FG-MG-AC	Stand-alone DNP3 Hardware	Hardware & Software incl (CoCT only), complete. No further licenses required.	Huawei, *Solis, Deye, *Sungrow, Fronius, Ingeteam, Goodwe, Bluelog, Canadian Solar, SMA, Sunsynk, Ingeteam, Meteocontrol, **
FG-ED-OO	Edge Device	Hardware & Software incl	-
FG-ED-CA	DNP3 site solution, complete assembly	Assembled solution	Huawei, Solis, Deye, Sungrow, Fronius, Ingeteam, Goodwe, Bluelog, Canadian Solar, SMA, Sunsynk, Ingeteam, Meteocontrol, **

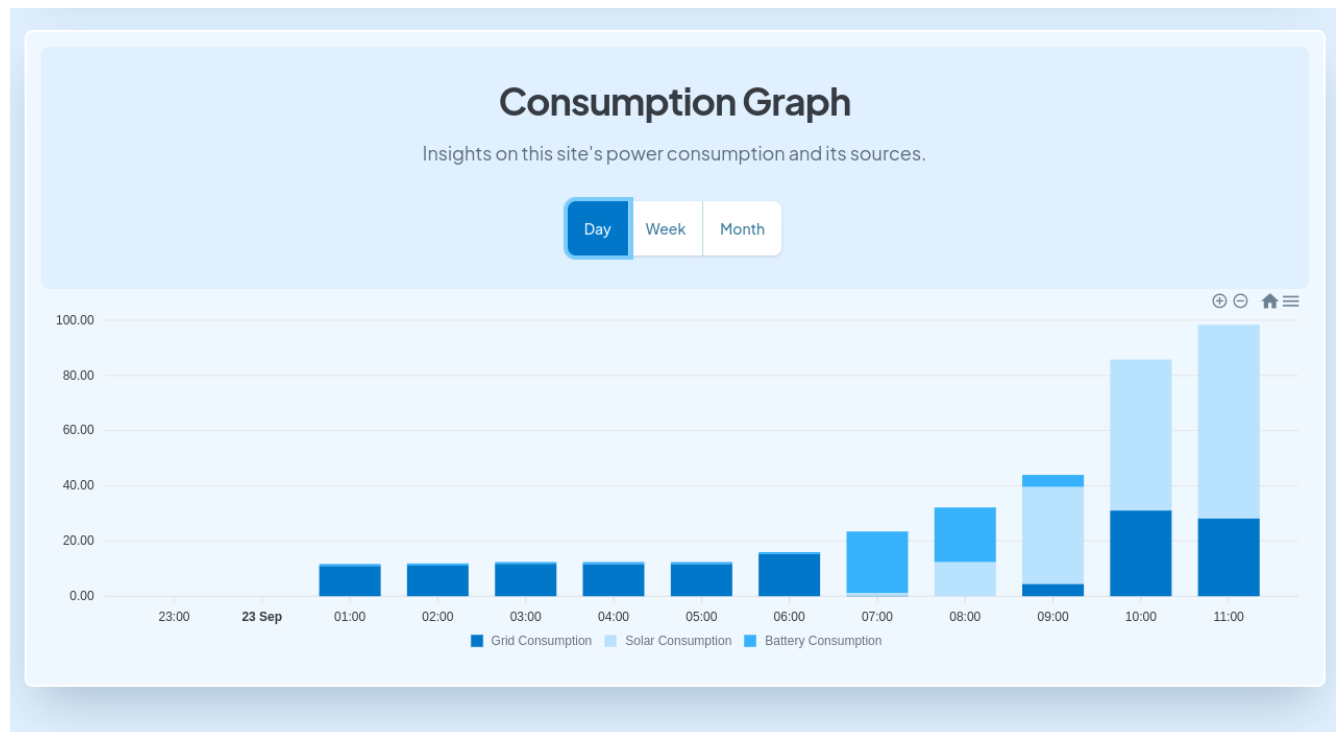
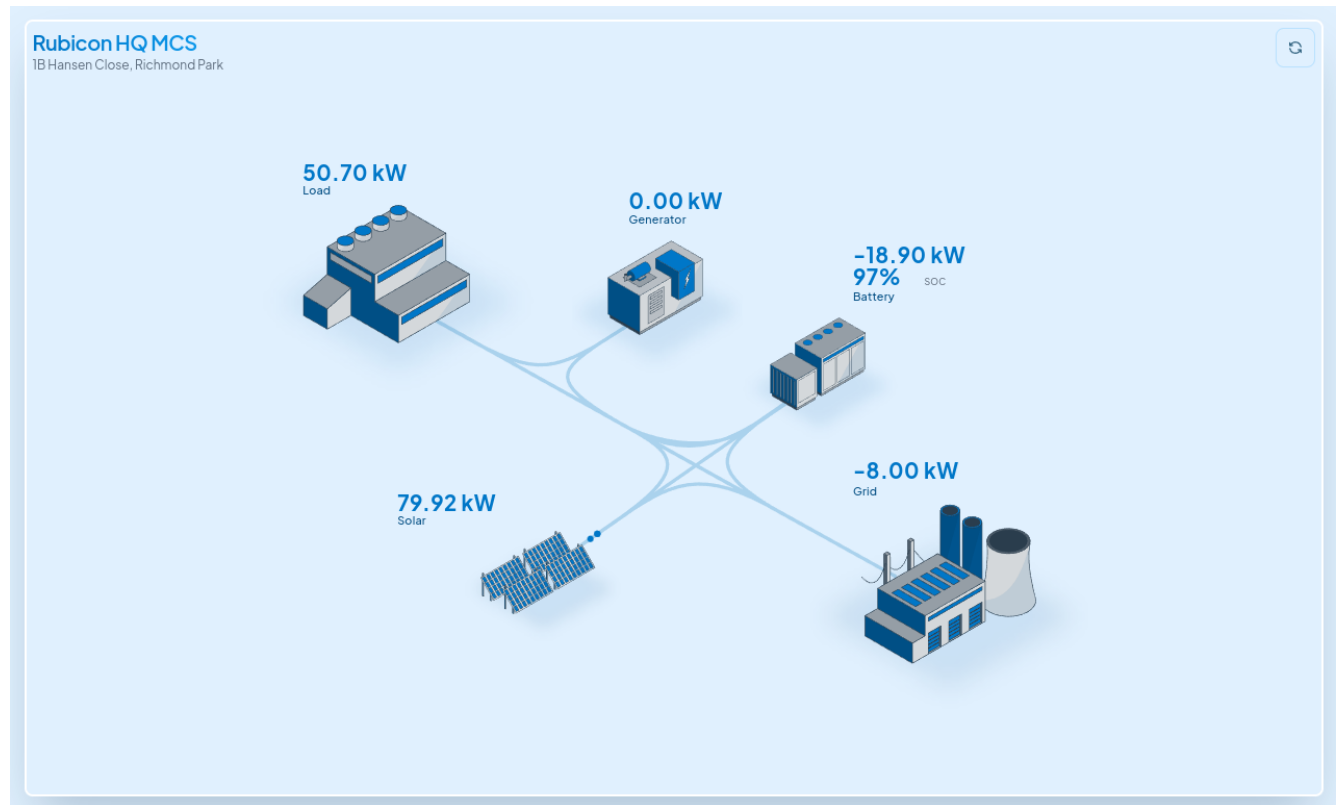
## LICENSES

SKU Code	Operation License	Comment	Compatibility
LI-G2-DNP3	DNP3 License for MCS-G2	CoCT DNP3 protocol comms for 100kW+ sites	APEX Gen 2 MCS
LI-G2-BAT-LITE	Battery Lite license for MCS-G2	PV/Genset/BESS, < 200kW AC	APEX Gen 2 MCS
LI-G2-BAT-STAND	Battery Standard license for MCS-G2	PV/Genset/BESS, 200 - 600kW AC	APEX Gen 2 MCS
LI-G2-BAT-PREMIUM	Battery Premium license for MCS-G2	PV/Genset/BESS, > 600kW AC	APEX Gen 2 MCS
LI-G2-PVGEN-LITE	PV/Genset Lite license for MCS-G2	PV/Genset, < 250kW AC	APEX Gen 2 MCS
LI-G2-PVGEN-STAND	PV/Genset Standard license for MCS-G2	PV/Genset, > 250kW AC	APEX Gen 2 MCS
LI-G2-SLR	Smart Load resumption (per end point) for MCS-G2	Software Key (Once off)	APEX Gen 2 MCS, APEX SGS, APEX EDGE
LI-G2-ILM	Intelligent Load Management (per end point) for MCS-G2	Software Key (Once off)	APEX Gen 2 MCS
LI-G2-MVA	Device Emulation. Used with meter aggregation, for MCS-G2	Software Key (Once off)	APEX Gen 2 MCS
LI-ED-MP	Edge Device Commercial site monitoring-only license for Fleet platform (Max 12 devices). (No control)	Software Key (Once off)	Various meters, Deepsea genset controllers, Huawei, Ingeteam, Sungrow, Solis, Goodwe, Canadian Solar, SMA, ATESS PCS, DEYE Hybrid inverters.**
LI-MG-PQ	Power quality measurement	Software Key (Once off)	***Availability TBC
FG-SS-UG1	Site software minor update	Update to existing plant (IP Address changes, minor site adjustments)	Post commissioning request
FG-SS-UG2	Site software major update	Update to existing plant (BESS add-on, Major software changes)	Post commissioning request

## WARRANTY EXTENSIONS

SKU Code	Device	Comment	Compatibility
WE-MG-G2	MCS G2 Controller	5-year extension	APEX Gen 2 MCS
WE-MG-DNP3	DNP3 Controller	5-year extension	APEX DNP3
WE-H2-OO	SGS Controller	3-year extension	APEX SGS

## FLEET PORTAL EXAMPLES:



## CONTACT US

For more or updated information, new products and technical support please visit:  
[www.ApexSolar.Tech](http://www.ApexSolar.Tech)