

# APEX

## MICROGRID CONTROLLER FAMILY DATASHEET



The APEX MCS 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.

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 local touchscreen or the internet portal on any compatible browser.
- Manage power flow between loads, diesel generators, grid-tied PV inverters, PCSs and batteries and the grid.
- Flexible hardware that can easily be configured to measure / control at any point within the distribution network.
- Flexible third-party device communication over CAN, Modbus TCP or Modbus RS485.

Specifications:

Parameter	Value
Dimensions	230 (l) x 170 (w) x 50 (h)
Mounting Method	Panel Mounted
Ingress Protection	20
Power Supply	230Vac 50Hz
Signal Inputs	3 x Vac (330Vac Max.)
	3 x Iac (5.8Aac Max.)
	1 x 0 to 10V / 0 to 20 mA input
Digital Inputs	5 Inputs
Digital Outputs	4 relay outputs <ul style="list-style-type: none"> <li>• Rated switching current: 5A (NO) / 3A (NC)</li> <li>• Rated switching voltage: 250 Vac / 30 Vdc</li> </ul>
Comms	TCP/IP over Ethernet/wifi
	Modbus over RS485/UART-TTL
	CAN Bus
Local HMI	Master: 7inch Touch Screen
Remote Monitoring and Control	Via APEX Portal

Ordering Information:

Product	Product	Value
FG-MG-AA	MCS Diesel / PV controller – anysize	Standard, most popular for PV / Diesel integration
FG-MG-xx	DNP3 add-on license for MCS	(only for Cape Town)
FG-MG-AB	Diesel / PV / Battery – up to 250kW AC	PV, Diesel and Batteries
FG-MG-AE	Diesel / PV / Battery – 251kw AC and up	PV, Diesel and Batteries
FG-MG-AC	DNP3 controller	(only for Cape Town)
FG-MG-AF	Diesel / PV controller “LITE” up to 250kW	Low cost option for PV / Diesel integration, no display.

Equipment Types	Compatible Products
Generator Controllers*	Deepsea 8610
	ComAp Inteligen
Battery Inverters (PCSs)*	ATESS PCS series
	WECO Hybo series
PV inverters*	Huawei
	Goodwe
	Solis
	SMA
	Sungrow
	Ingeteam
	Schneider
	Deye
	Sunsynk
3rd Party controllers*	Meteocontrol Bluelog
	Solar-Log
Power meters*	Lovato DMG110
	Schneider PM3255
	Socomec Diris A10
	Janitza UMG104

\*Other types on request

# CONTACT US

For more or updated information, new products and technical support please visit:

**[www.ApexSolar.Tech](http://www.ApexSolar.Tech)**

