

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.





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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 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 (I) 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 lac (5.8Aac Max.) |
| | 1 x O to 10V / O to 20 mA input |
| Digital Inputs | 5 Inputs |
| Digital Outputs | 4 relay outputs |
| | Rated switching current: 5A (NO) / 3A (NC) |
| | Rated switching voltage: 250 Vac / 30 Vdc |
| 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 Code | 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