



# PARALLELING SOLUTIONS

For generators

Innovation for better control and application



YOUR EXPERT IN GENERATOR SOLUTIONS



## GENSYS COMPACT MAINS

The GENSYS COMPACT MAINS is a new panel-mounted generator controller fit for standby application

This new generation of controller is optimized for its ease of use. The GENSYS COMPACT MAINS benefit from years of CRE TECHNOLOGY experience in mains paralleling with standby genset, whatever it is permanent paralleling, automatic mains failure detection or no break transfer.

The GENSYS COMPACT MAINS offers a fully compatible module with all speed governors and AVR's and J1939 communication with electronic engines. Isolated speed and AVR outputs and 3 isolated communication ports: 2 for CAN bus, 1 for Ethernet. It includes all necessary functions:

- Manual or automatic generator control
- Automatic start/stop depending on mains failure or external request
- kW peak Shaving or kW base load mains paralleling with PF control
- Automatic frequency & phase synchronisation (differential frequency meter + synchroscope available on screen)
- Engine parameters: oil pressure, water temperature, speed, hours run meter

## RDM 3.0 GENSYS 2.0 CORE

Touch screen & colour remote display module for all-in-one genset control and paralleling unit

RDM 3.0 supplements GENSYS 2.0 CORE, to control a single generating sets power in a power plant. Connected to a GENSYS 2.0 or GENSYS 2.0 LT, RDM 3.0 module can be used as an additional remote display.

RDM 3.0 repeats the display part of GENSYS 2.0. The screen shows the complete application, engine and electrical parameters for intuitive operation.



### FEATURES

- Competitive price & Compact product
- Multi-function graphic display
- 3 isolated ports comm
- J1939 compatibility
- CANopen devices (up to 64 digital inputs/outputs)



### FEATURES

- Color touch screen 15" (RDM 3.0)
- Multi-function graphic display
- Embedded PLC
- 5 isolated serial ports (GENSYS 2.0 CORE)
- GENSYS inputs/outputs display
- Fully compatible with most speed governors & AVR's
- Remote I/O CANopen management



### FEATURES

- Competitive price & Compact product
- Multi-function graphic display
- 3 isolated ports comm
- J1939 compatibility
- CANopen devices

## GENSYS COMPACT PRIME

The GENSYS COMPACT PRIME is a panel-mounted generator controller fit for standby application

This controller is optimized for its ease of use. Installation and configuration for up to 32 generators in island(-parallel mode). GENSYS COMPACT PRIME will benefit from years of GENSYS 2.0 experience.

It includes all necessary functions:

- Up to 32 generators in parallel,
- Manual or automatic generator control,
- kW & kVAR load sharing control,
- Dead busbar management,
- Automatic frequency & phase synchronisation (differential frequency meter + synchroscope available on screen)
- Engine parameters: oil pressure, water temperature, speed, hours run meter





## GENSYS 2.0

**GENSYS 2.0 is a control unit designed for generator electrical panels. It combines all necessary functions:**

- Automatic transfer on mains failure
- Engine start/stop and protection
- Alternator control and protection
- Mechanical and electrical parameters display
- Generator synchronization and load sharing by kW & kVAR control
- Manual and automatic paralleling with mains (frequency, phase, voltage)
- kW power management with several modes
- Permanent paralleling in base load & in peak shaving mode
- Power factor control when paralleling with mains.
- Vector phase compensation for step-up transformer (ex Dyn11)

GENSYS 2.0 configured via its front panel or via a PC with CRE Config software. The unit has analog load sharing inputs and is compatible with all types of analog load sharing modules.



### FEATURES

- One model for most generator applications
- Fully compatible with most speed governors & AVRs
- Remote I/O CANopen management
- Multi-function graphic display
- No break change over with load transfer
- 5 isolated serial ports
- J1939 communications
- Embedded PLC



## UNIGEN 2.0 RANGE

### SYNCHRO - ILS - PMS

The UNIGENs 2.0 series are used on generator sets that require synchronizing, load sharing, load/unload management, J1939 communication, protections as well as paralleling features. UNIGEN 2.0 ILS and UNIGEN 2.0 PMS can be used to parallel up to 32 gensets together using CAN bus communication. Moreover, UNIGEN 2.0 PMS can also be used to parallel or a single genset with the mains. One unit is needed per generating set. Intuitive settings to configure each functions needed.

- UNIGEN2.0 Synchro : can be used to manage synchronization for speed/Hz/Phase and synchronization for Voltage, thank to analogue outputs or pulse outputs : for all synchronous system.
- UNIGEN 2.0 PMS : can be used to manage all functions of Power Management + protections on power plant. No engine management.
- UNIGEN2.0 ILS : can be used to manage KW and KVAR load sharing until 32 generators on a common bus bar.



## BSD 2.0

### Remote monitoring box

BSD 2.0 is a remote monitoring and control box for GENSYS COMPACT RANGE, GENSYS 2.0 and MASTER 2.0 application. It communicates via GSM/GPRS/3G using a SIM card - compatible with most of the worldwide network - or over wired Ethernet. Data are saved on a server.

The server offers pages presenting the values on widgets, plotting them for trending, and handling the alarms/faults (filtering). Datas are accessible through customer profiles from any platform (PC, phone, tablet...).



#### FEATURES

- Cloud technology
- Plug'n play for a fast operation
- Email or SMS notification of alarms/faults
- Theft notice (geo-fencing)
- Mimic based on widgets
- Access profiles
- No licence costs



#### FEATURES

- One model for most generator applications
- Multi-function graphic display
- Fully compatible with most speed governors & AVRs
- No break change over with several modes
- 5 isolated serial ports & J1939 communications



#### FEATURES

- One model for most mains applications
- Remote I/O CANopen management
- Multi-function graphic display
- 5 isolated serial ports
- 1 or 2 breaker management
- Embedded PLC

## GENSYS 2.0 LT

### All-in-one genset control and paralleling unit

GENSYS2.0 LT is a control unit designed for generator electrical panels. It combines all necessary functions when custom instructions are not required:

- Automatic transfer on mains failure
- Engine start/stop and protection
- Alternator control and protection
- Mechanical and electrical parameters display
- Load sharing by kW control & kVAR control
- Manual & automatic paralleling with mains (frequency, phase & voltage)
- kW power management with several modes
- Permanent paralleling in base load & in peak shaving mode
- Power factor control when paralleling with mains.
- Vector phase compensation for step-up transformer (ex Dyn11)

GENSYS2.0 LT is configurable via its front panel or via a PC with CRE Config software.

## MASTER 2.0

### All-in-one mains paralleling unit

MASTER 2.0 is a power plant controller for mains in parallel with several generators. It includes all necessary functions:

- Mains management
- Three phase mains failure detection
- Electrical protection & parameters display
- Manual and automatic paralleling with mains (frequency, phase & voltage)
- kW power management with several modes
- No break change over with load transfer
- Permanent paralleling in base load & in peak shaving mode
- Power factor control when paralleling with mains
- Vector phase compensation for step-up transformer (ex Dyn11)





# RDM 2.0 & GENSYS 2.0 CORE

Remote display module and core unit for all-in-one genset control and paralleling unit

The kit RDM 2.0 and GENSYS 2.0 CORE has the same properties as GENSYS 2.0 and allows several power plant possibilities. It is an extendable system that can be optimized to your space facility.

The display shows intuitively mechanical and electrical parameters and users can switch screens, set password, change setpoints and view history record.



## CRE CONFIG

Configuration software

CRE TECHNOLOGY has developed a new PC software which allows you to connect to multiple GENSYS & UNIGEN Family modules. This user-friendly software allows you to configure and monitor your power plant in real time.

- As a SCADA (monitoring), for configuration and module setting (SYSTEM)

CRE Config software allows you to configure and monitor up to 14 modules.

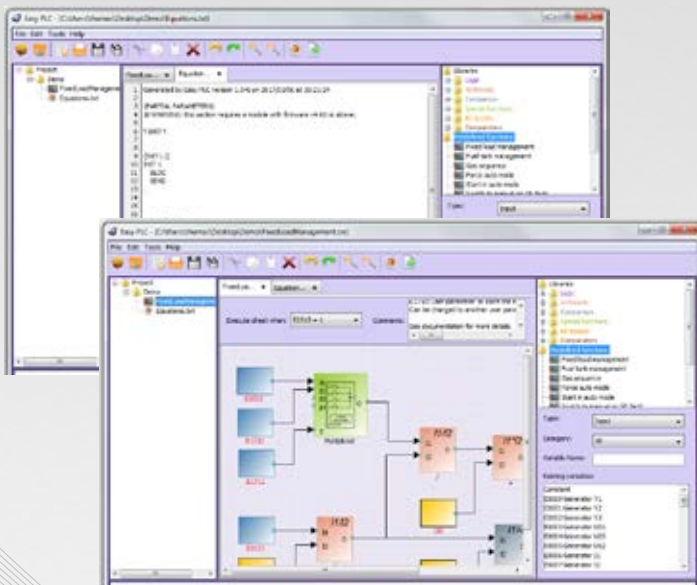


## EASY PLC

Program and customize your internal logical sequences

CRE TECHNOLOGY's Easy PLC is a logic editor which provides graphical interface to create PLC instructions for GENSYS2.0.

Easy PLC simplifies the process of proprietary writing instructions thanks to a user-friendly graphic environment. That includes many sheets in which the user create instructions through «operators».



## DEMONSTRATION SUITECASE

For GENSYS 2.0 & GENSYS COMPACT PRIME or customer product demonstration on application tests.

This test and demonstration cases (built in flight case) is for our GENSYS 2.0 & GENSYS COMPACT PRIME. Inputs/outputs are wired on switch or lamps. Connections are made with a 230VAC outlet. CRE Config software allows you to configure and monitor up to 14 modules.





EXPERT IN GENERATOR SOLUTION

**CRE TECHNOLOGY**

130 allée Charles-Victor Naudin - Les templiers - Sophia Antipolis

06410 BIOT / FRANCE

Tél: +33 (0) 492 38 86 82

Fax: +33 (0) 492 38 86 83

info@cretechnology.com



[www.cretechnology.com](http://www.cretechnology.com)

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