ONE SOLUTION FOR ALL GENSET APPLICATIONS

WEB BASED

D-700

B/W AND TFT VERSIONS

The D-700 is a next generation synchronizing genset controller capable of every communication and functionality.

Easy commissioning is achieved with automatic learning feature.

COMMUNICATIONS

- Ethernet port (10/100Mb)
- GSM-GPRS
- Internal GPRS modem (optional)
- Embedded web server
- Web monitoring
- Web programming
- Central Monitoring through internet
- SMS message sending
- E-mail sending
- Free PC software: Rainbow Plus
- Free Central Monitoring (2 years)
- Modbus RTU through RS-485
- Modbus TCP/IP
- SNMP
- USB Host
- USB Device
- RS-485 port, adjustable baud rate
- RS-232
- Micro SD card slot
- J1939-CANBUS

FUNCTIONALITIES

- Multi genset synch and load share
- Mains synchronization
- Single genset parallel with mains
- AMF unit with uninterrupted transfer
- ATS unit with uninterrupted transfer
- Remote start controller
- Manual start controller
- Engine controller
- Remote display & control unit

TOPOLOGIES

- 2 phases 3 wires, L1-L2
- 2 phases 3 wires, L1-L3
- 3 phases 3 wires, 2 CTs
- 3 phases 3 wires, 2 CTs (L1-L2)
- 3 phases 3 wires, 2 CTs (L1-L3)
- 3 phases 4 wires, star
- 3 phases 4 wires, delta
- 1 phase 2 wire
**TECHNICAL SPECIFICATIONS**

- **Alternator voltage:** 0 to 300 V-AC (Ph-N)
- **Alternator frequency:** 0-600 Hz.
- **Mains (Busbar) voltage:** 0 to 300 V-AC (Ph-N)
- **Mains (Busbar) frequency:** 0-600 Hz.
- **Topology:** 1-2-3 phases, with or without neutral
- **DC Supply Range:** 8.0 to 36.0 V-DC.
- **V-A-cos Accuracy:** 0.5% + 1 digit
- **kW-kVA-kVar Accuracy:** 1.0% + 1 digit
- **Current consumption:** 500 mA-DC max.
- **Current Inputs:** from current transformers. .../5A.
- **Digital inputs:** input voltage 0 to 36 V-DC.
- **Analog input range:** 0-5000 ohms.
- **Digital Outputs:** Protected mosfet semiconductor outputs, rated 1Amp@28V-DC
- **Cranking dropouts:** survives 0V for 100ms.
- **Magnetic pickup voltage:** 0.5 to 50Vpk.
- **Magnetic pickup frequency:** 0 to 20000 Hz.
- **GOV Control Output:** ±5V-DC
- **AVR Control Output:** ±5V-DC, fully isolated
- **Charge Alternator Excitation:** 2W.
- **Display Screen:**
  - B/W versions: 2.9”, 128x64 pixels
  - TFT versions: 4.3”, 480x272 pixels
- **Ethernet Port:** 10/100 Mbits
- **USB Device:** USB 2.0 Full speed
- **USB Host:** USB 2.0 Full speed
- **RS-485 Port:** selectable baud rate
- **RS-232 Port:** selectable baud rate
- **Data Link Port:** Fully Isolated CANBUS
- **Operating temperature:** -20°C to 70°C (4 to +158 °F)
- **Storage temperature:** -40°C to 80°C (-40 to +176 °F)
- **Maximum humidity:** 95% non-condensing
- **IP Protection:** IP54 from front panel, IP30 from the rear.
- **Dimensions:** 243 x 183 x 47mm (WxHxD)
- **Panel Cut-out Dimensions:** 216 x 156 mm minimum.
- **Weight:** 600 g (approx.)
- **Case Material:** High Temperature, non-flammable ABS/PC
- **Mounting:** Front panel mounted with rear retaining plastic brackets.
- **EU Directives Conformity**
  - -2006/95/EC (low voltage)
  - -2004/108/EC (electro-magnetic compatibility)
- **Norms of reference:**
  - EN 61010 (safety requirements)
  - EN 61326 (EMC requirements)
- **UL Compatibility:**
  - UL 508 - Industrial Control Equipment
- **CSA Compatibility:**
  - CAN/CSA C22.2 No. 14-2005 – Industrial Control Equipment
The embedded web server is available through the Ethernet port. It provides monitoring, remote control, event record display and parameter setup.

The Windows based Rainbow Plus program allows monitoring, remote control, event record display and parameter setup. It connects through USB, RS-485 and Internet.

The Rainbow Scada central monitoring program runs on server and supports up to 30,000 units on a single screen. It allows monitoring, control and remote parameter setup through internet.

Up to 48 gensets may be paralleled on the same busbar. Smart load management is standard feature.

Up to 16 mains controller per system are supported. Mains controllers provide the REMOTE START signal and control synchronization with mains of the complete genset system.

The controller supports synchronization and parallel operation with mains. Supported features include soft transfer, peak lopping, peak shaving and power export.