



Genset Controller

D-300

Web-Based Genset Controller
ready for internet monitoring



FEATURES

Diesel and gas genset support
 400Hz operation support
 400 event logs, full snapshot
 All parameter front panel editable
 3 level configuration password
 128x64 graphical LCD display
 Downloadable languages
 Waveform display of V & I
 Harmonic analysis of V & I
 16Amp MCB & GCB outputs
 8 configurable digital inputs
 6 configurable digital outputs
 3 configurable analog inputs
 Both CANBUS-J1939 & MPU
 3 configurable service alarms
 Multiple automatic exerciser
 Weekly operation schedule
 Dual mutual standby with equal aging of gensets
 Manual "speed fine adjust" on selected ECUs
 Automatic fuel pump control
 Disable protections feature
 Excess power protection
 Reverse power protection
 Overload IDMT protection
 Load shedding, dummy load
 Multiple load management
 Current unbalance protection
 Voltage unbalance protection
 Fuel filling and fuel theft alarms

Battery back-up real time clock
 Idle speed control
 Battery charge run enabled
 Combat mode support
 Multiple nominal conditions
 Contactor & MCB drive
 4 quadrant genset power counters
 Mains power counters
 Fuel filling counter
 Fuel consumption counter
 Modem diagnostics display
 Configurable through USB, RS-232 and GPRS
 Free configuration program
 Allows SMS controls
 Ready for central monitoring
 Mobile genset support
 Automatic GSM geo-location
 GPS connectivity (RS-232)
 Easy USB firmware upgrade
 IP65 rating with optional gasket

MEASUREMENTS

Mains & genset L-N / L-L voltages
 Mains & genset frequency
 Mains & genset line currents
 Mains & genset neutral currents
 Mains & genset, line & total, kW, kVA, kVA_r, pf
 Engine speed
 Battery voltage

COMMUNICATIONS

4-band GPRS modem (optional)
 USB device
 RS-232 (2400-115200 baud)
 J1939-CANBUS
 Geo-locating through GSM
 GPS support (RS-232)
 Internet Central Monitoring
 SMS message sending
 E-mail sending
 Free PC software: Rainbow Plus
 Modbus RTU

FUNCTIONALITIES

AMF unit
 ATS unit
 Remote start controller
 Manual start controller
 Engine controller
 Remote display panel

TOPOLOGIES

3 phase-4 wire, star & delta
 3 phase-3 wire, 2 CT's
 2 phase-3 wire
 1 phase-2 wires

APPROVALS



What's New!



For more information or the latest certifications, please contact:
 PC&S, Inc. at +1 (800) 523-9194 or +1 (973) 448-9400

www.pc-s.com

COMMUNICATIONS



TECHNICAL SPECIFICATION

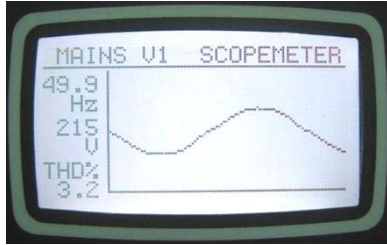
Alternator voltage: 0 to 300 V-AC (Ph-N)
Alternator frequency: 0-600 Hz.
Mains voltage: 0 to 300 V-AC (Ph-N)
Mains frequency: 0-600 Hz.
Topology: 1-2-3 phases, with or without neutral
DC Supply Range: 8.0 to 36.0 V-DC.
V-A-cos Accuracy: 0.5% + 1 digit
kW-kVA-kVAr Accuracy: 1.0% + 1 digit
Current consumption: 200 mA-DC max @ 12V-DC
Current Inputs: from current transformers. .../5A.
Digital inputs: input voltage 0 to 36 V-DC.
Analog input range: 0-5000 ohms.
Mains and genset contactor outputs: 16Amps@250V
DC 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.
Charge Alternator Excitation: 2W.
Display Screen: 2.9", 128x64 pixels
USB Device: USB 2.0 Full speed
RS-232 Port: selectable baud rate (2400-115200baud)
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: IP65 from front panel, IP30 from the rear (with gasket)
Dimensions: 172 x 134 x 46mm (WxHxD)
Panel Cut-out Dimensions: 151 x 111 mm minimum.
Weight: 300 g (approx.)
Case Material: High Temperature, non-flammable ABS/PC
Installation: Flat surface mounting on a Type 1 enclosure. Rear retaining plastic brackets.

CONFORMITY

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

WAVEFORM DISPLAY & HARMONIC ANALYSIS



Waveform Display



Graphical Harmonics

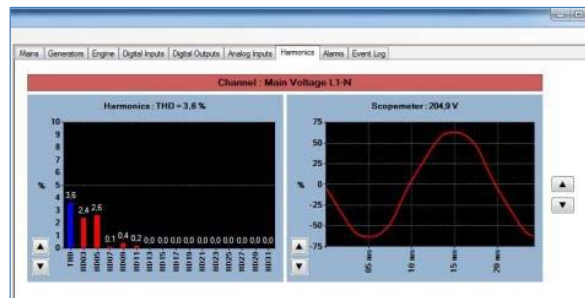


Digital Harmonics Display

RAINBOW PLUS PROGRAM

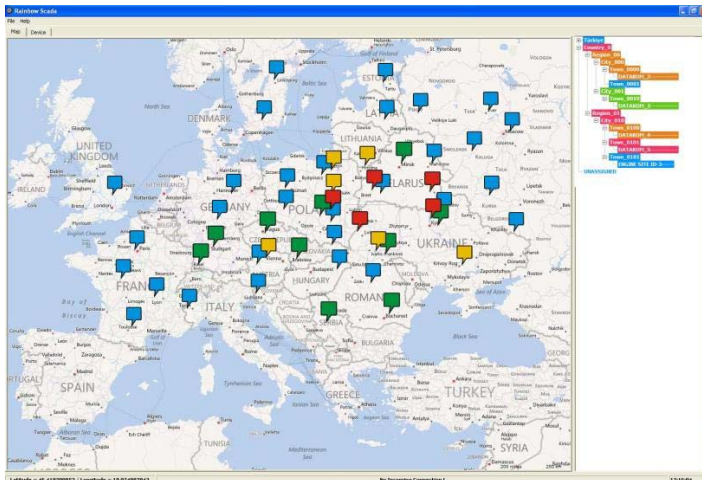


Scada



Harmonic analysis & Waveform

RAINBOW SCADA CENTRAL MONITORING



Fleet Display on Map, online monitoring



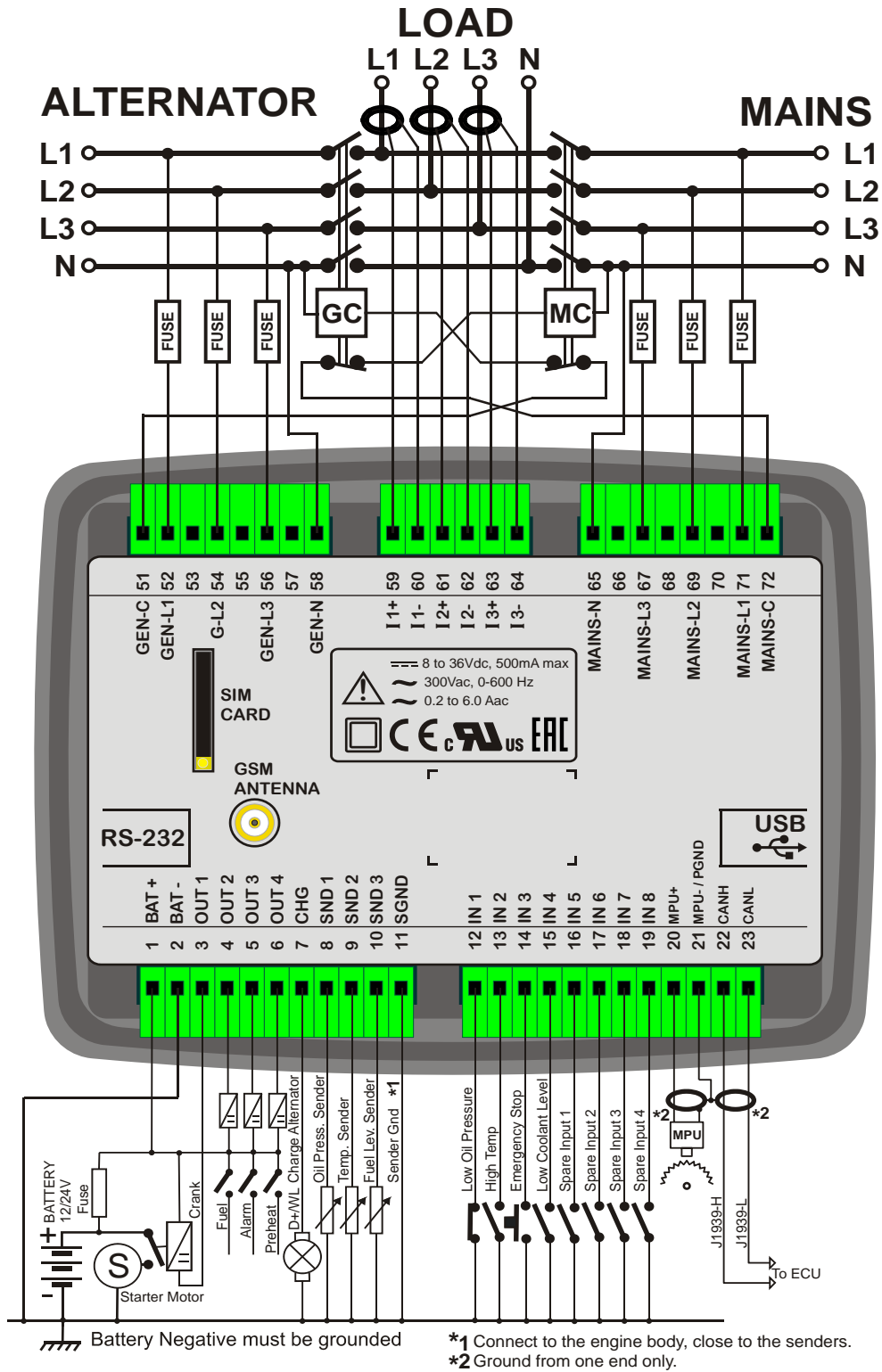
Smartphone Support

Summary Information Genset Mains Engine Alarms Control Outputs

Mains L1 : 224.8 V	Genset L1 : 224.6 V	Battery Voltage : 13.50 Vdc
Mains L2 : 224.2 V	Genset L2 : 224.3 V	Engine RPM : 1500 RPM
Mains L3 : 226.1 V	Genset L3 : 226.0 V	Oil Pressure : N/A Bar
Mains L1-L2 : 389.0 V	Genset L1-L2 : 388.8 V	Coolant Temp : N/A °C / °F
Mains L2-L3 : 389.8 V	Genset L2-L3 : 389.8 V	Oil Temp : 69.3 °C / 156.7 °F
Mains L3-L1 : 390.3 V	Genset L3-L1 : 390.1 V	Fuel Level : 51.1 %
Mains I1 : 0.0 A	Genset I1 : 160.9 A	Engine Run Hours : 802.17 Hrs
Mains I2 : 0.0 A	Genset I2 : 275.4 A	Total kWh : 332311.1 kWh
Mains I3 : 0.0 A	Genset I3 : 118.7 A	Total kVarh (Ind) : 0.1 kVarh
Mains Freq : 50.02 Hz	Genset Freq : 50.01 Hz	Total kVarh (Cap) : 46245.2 kVarh
Mains P Total : 0.0 kW	Genset P Total : 124.2 kW	Hours to Srv1 : 9512003.35 Hrs
Mains Q Total : 0.0 kVAR	Genset Q Total : -8.0 kVAR	Days to Srv1 : -2684277.95 Day
Mains S Total : 0.0 kVA	Genset S Total : 124.5 kVA	
Mains Pwr Factor : 1.000	Genset Pwr Factor : 0.997	

Real time monitoring

TYPICAL CONNECTIONS



www.pc-s.com

For more information and certifications, please contact:

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