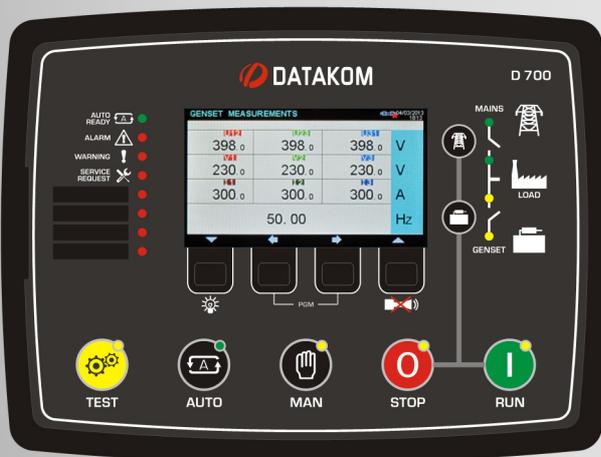


ONE SOLUTION FOR ALL GENSET APPLICATIONS

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

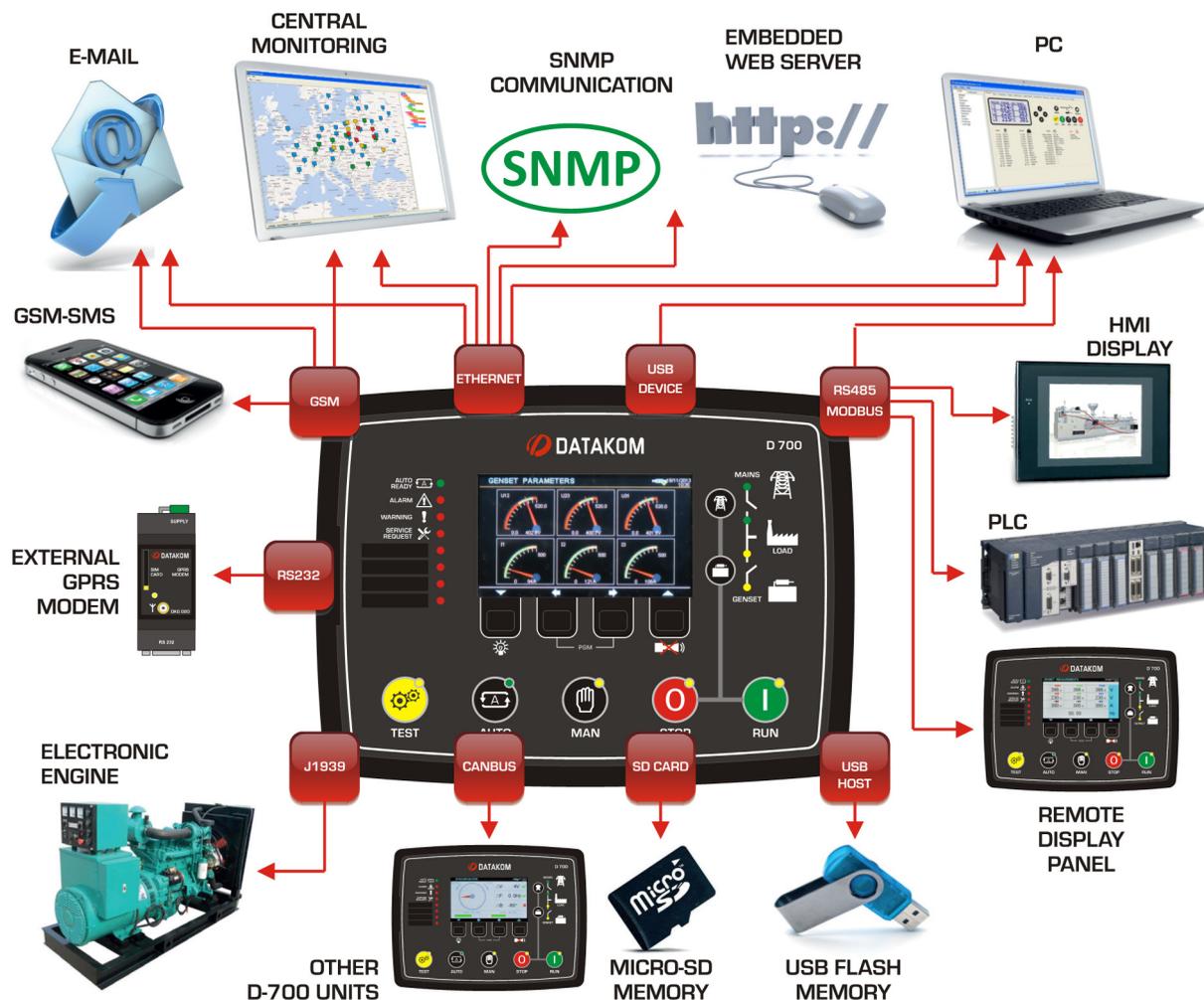
FUNCTIONALITIES

- 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

COMMUNICATIONS



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: 0-10V-DC
AVR Control Output: ± 5 V-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: 700 g /1.55lb (approx.)
Case Material: High Temperature, non-flammable ABS/PC
Installation: Flat surface mounting on a Type 1 enclosure. 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

EMBEDDED WEB SERVER

The embedded web server is available through the Ethernet port. It provides monitoring, remote control, event record display and parameter setup.



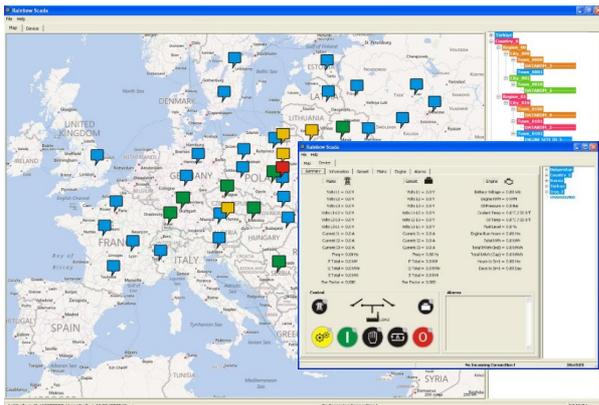
RAINBOW PLUS PROGRAM

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



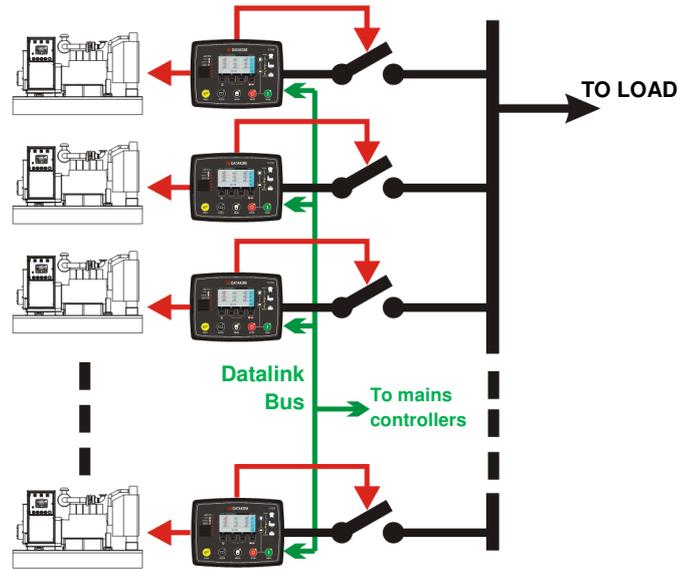
RAINBOW SCADA PROGRAM

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.



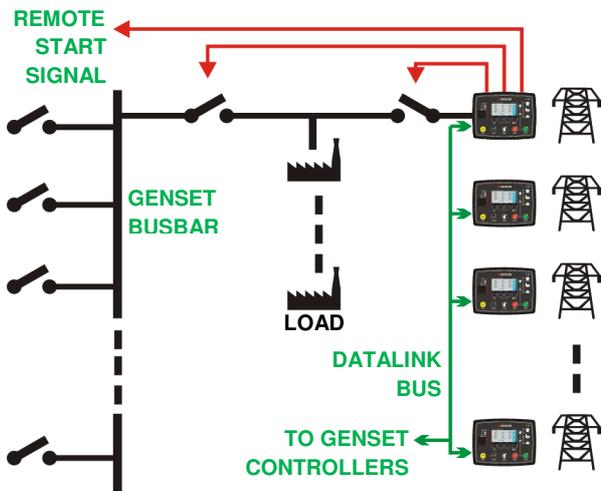
MULTI GENSET SYNCHRONIZATION

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



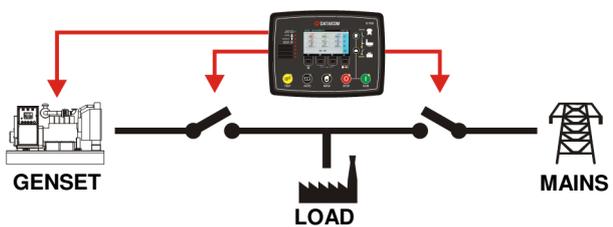
MAINS SYNCHRONIZATION

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.



SINGLE GENSET PARALLEL WITH MAINS

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



TYPICAL CONNECTIONS

