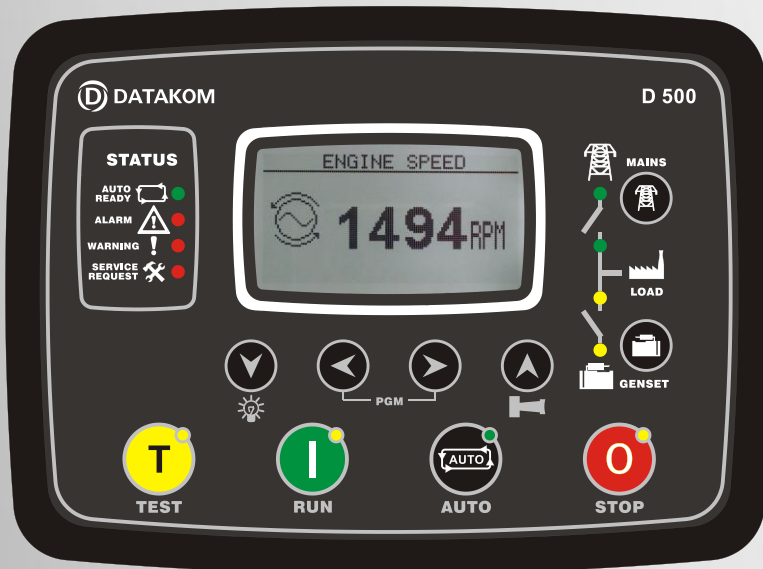


TECHNOLOGY IS NOW FOR EVERYONE



THE NEW WEB BASED D-500

The D-500 is an advanced genset controller capable of every possible communication and functionality.

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 (100 genset)
- Modbus RTU through RS-485
- Modbus TCP/IP
- SNMP
- USB Host (optional)
- USB Device
- RS-485 port, adjustable baud rate
- RS-232 (optional)
- Micro SD card slot (optional)
- J1939-CANBUS

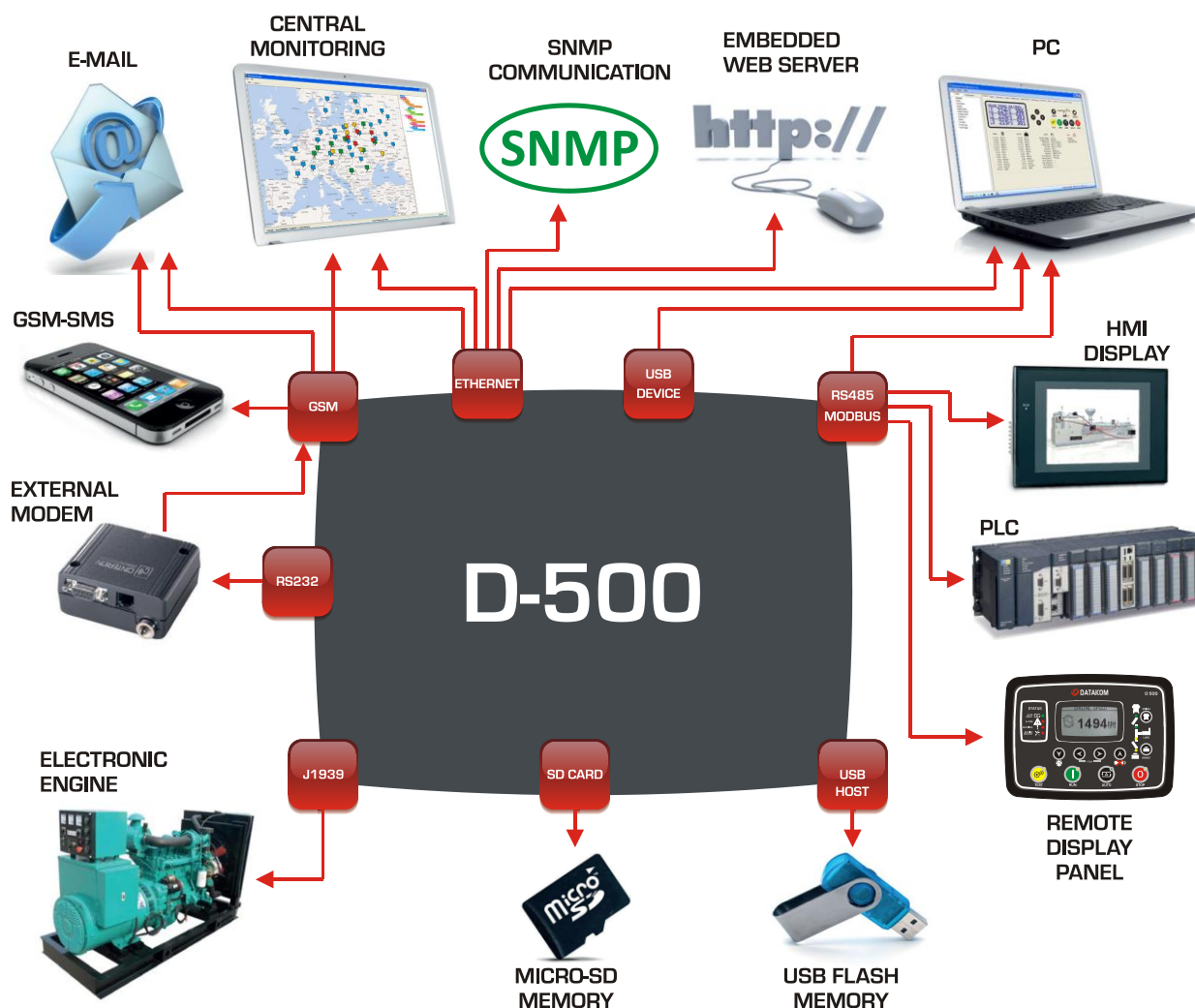
FUNCTIONALITIES

- AMF unit with uninterrupted transfer
- ATS unit with uninterrupted transfer
- Remote start controller
- Manual start controller
- Engine controller
- Remote display & control unit
- 400 Hz enabled
- Waveform display of V & I
- Harmonic analysis of V & I
- CTs at genset or load side
- Long term recording on flash card

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 wires

COMMUNICATIONS

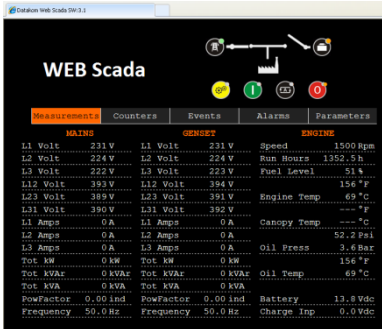


TECHNICAL SPECIFICATIONS

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: 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.
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.
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

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: 200 x 148 x 46mm (WxHxD)
Panel Cut-out Dimensions: 176 x 121 mm minimum.
Weight: 450 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

WEB SERVER

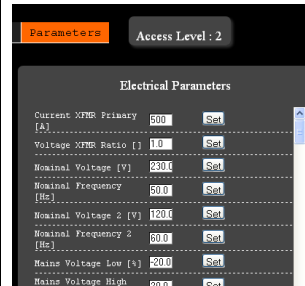


Digital Monitoring

WEB Scada

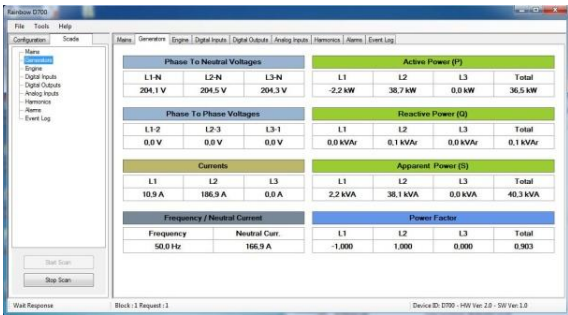
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0	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
1	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
2	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
3	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
4	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
5	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
6	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
7	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
8	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V
9	Periodic	04-09-2012	10:00:00	OFF	Device	Da-Data	228 V	232 V	222 V	228 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V	222 V

Event Log Display

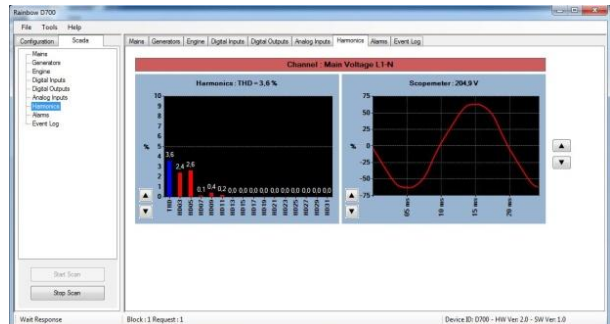


Web Programming

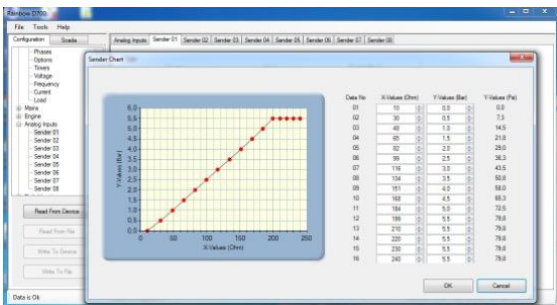
RAINBOW PLUS PROGRAM



Scada



Waveform display & Harmonic analysis

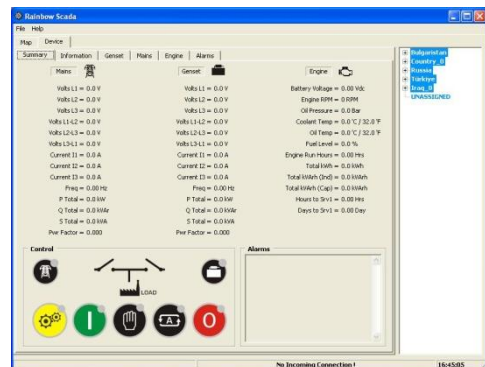
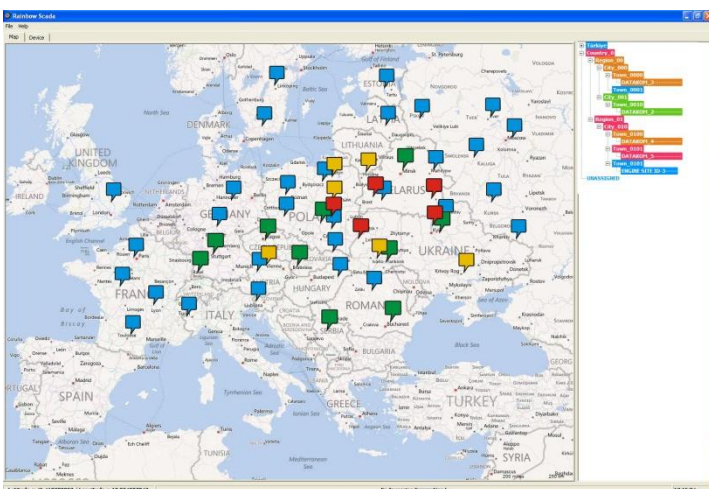


Programming

Connection interfaces:

- USB
- IP (ethernet or GPRS)
- Serial port

RAINBOW SCADA PROGRAM



Monitoring & Control Screen

TYPICAL CONNECTIONS

