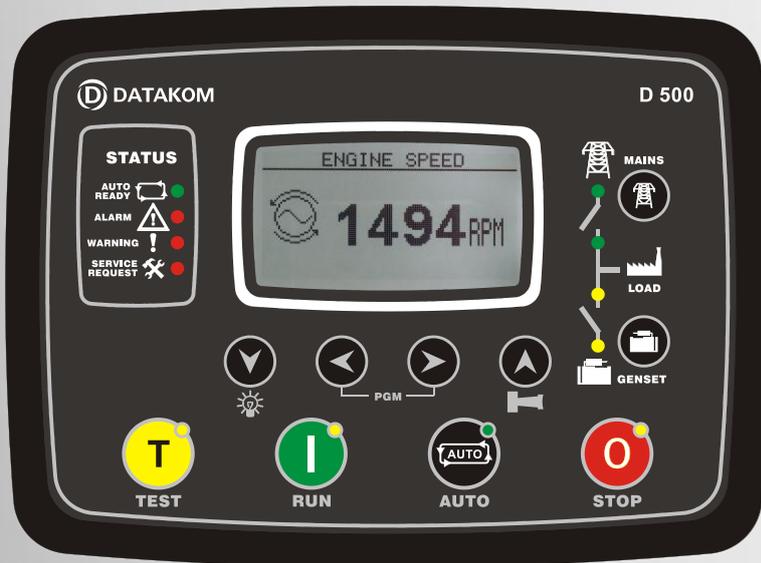


# TECHNOLOGY IS NOW FOR EVERYONE



## 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

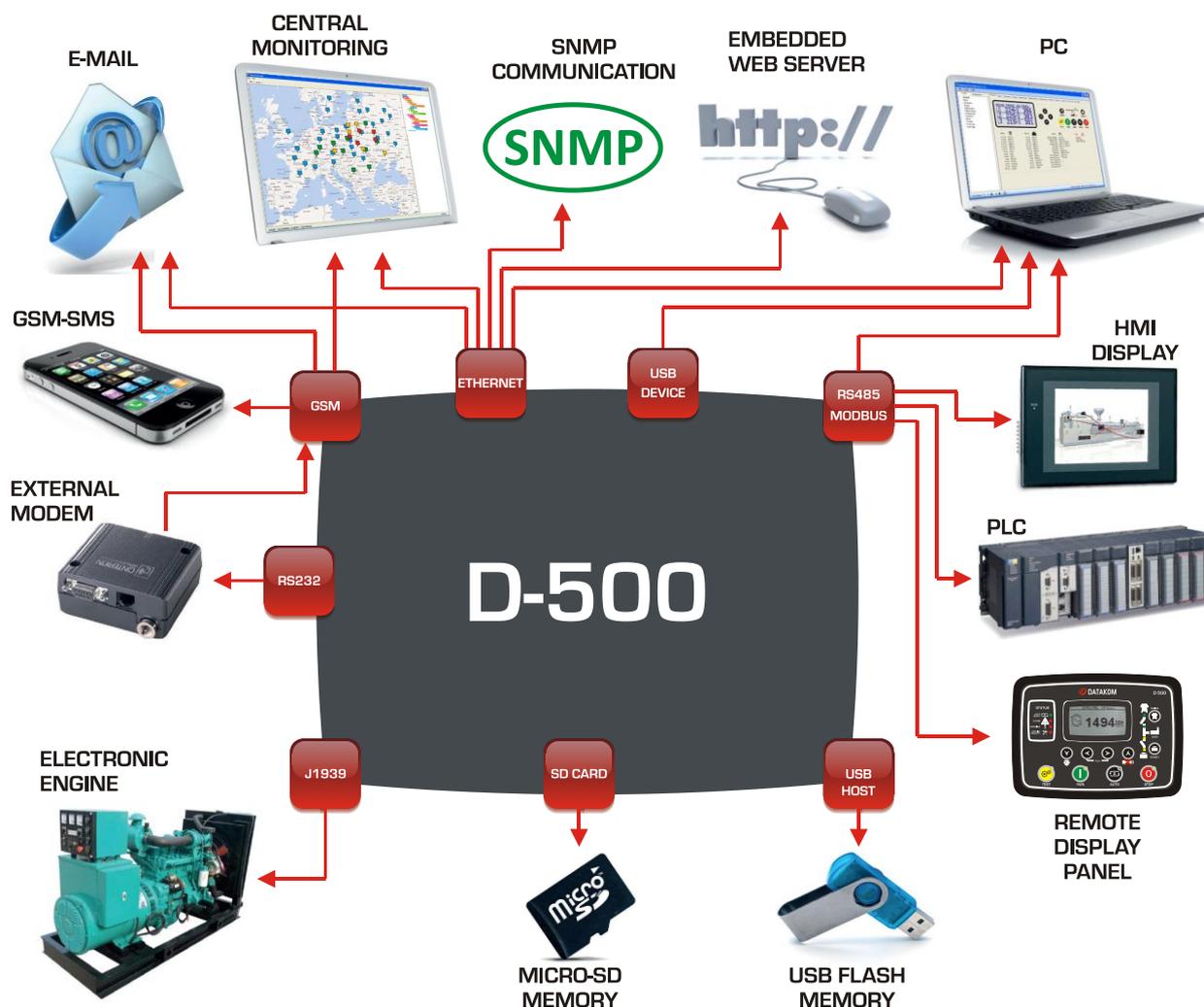
### FUNCTIONALITIES

- 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

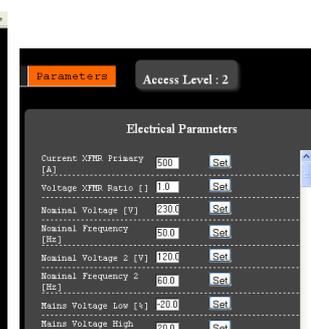


Digital Monitoring

**WEB Scada**

Time	Alarm	Status	Time	Status	Message	Time	Status	Message	Time	Status	Message
04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal
04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal
04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal
04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal
04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal	04-09-2012 13:00:00	OFF	Normal

Event Log Display

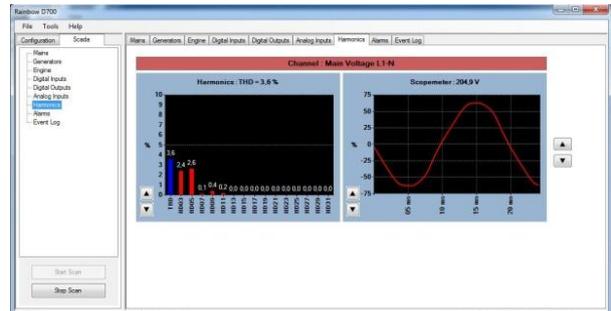


Web Programming

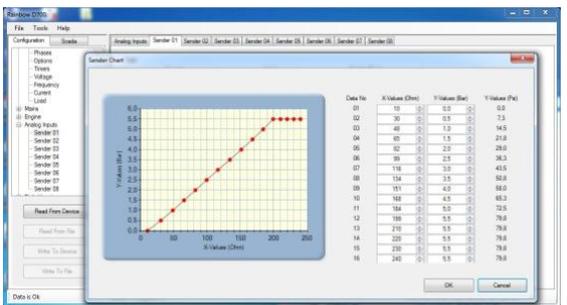
# RAINBOW PLUS PROGRAM



Scada



Waveform display & Harmonic analysis



Programming

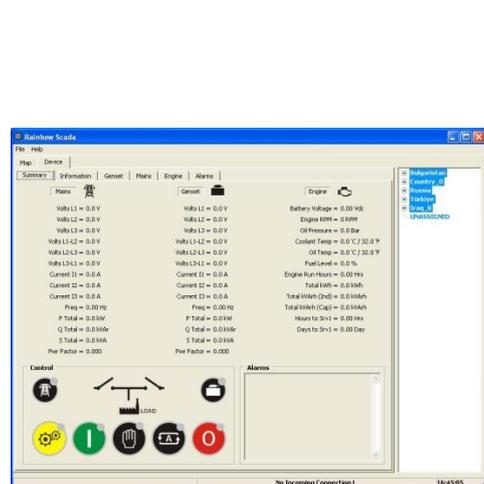
## Connection interfaces:

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

# RAINBOW SCADA PROGRAM



Complete Fleet Display on Map



Monitoring & Control Screen

# TYPICAL CONNECTIONS

