

## 181 KVA DIESEL GENERATOR

### FEATURES & BENEFITS

- Maximum 199 kVA, 380V, 1500 RPM
- Constant voltage AVR (Automatic Voltage Regulator)
- 24 Volt Electric Starter
- 250 Litre Fuel Tank, 8 Hours @ 75% load
- Silent Version ( $\pm 72$  dBA)
- Six cylinder, vertical, water cooled Diesel Engine
- Three Phase Output
- Datakom D300 Digital Control Panel
- Low oil pressure system
- Low water cut out engine protection



| GENERAL DATA                   |             |
|--------------------------------|-------------|
| <b>Model:</b>                  | BPD180S3    |
| <b>Prime Power (P.R.P):</b>    | 181 kVA     |
| <b>Stand-by Power (L.T.P):</b> | 199 kVA     |
| <b>Amps:</b>                   | 302 A       |
| <b>Power Factor / COS:</b>     | 0.8         |
| <b>Frequency:</b>              | 50 Hz       |
| <b>Voltage:</b>                | 380 V       |
| <b>Phases:</b>                 | Three Phase |
| <b>Engine Speed:</b>           | 1500 RPM    |
| <b>Length:</b>                 | 2990 mm     |
| <b>Width:</b>                  | 1100 mm     |
| <b>Height:</b>                 | 1680 mm     |
| <b>Weight:</b>                 | 2057 kg's   |
| <b>Tank Capacity:</b>          | 250 l       |

| ADDITIONAL                     |                      |
|--------------------------------|----------------------|
| <b>Running Time:</b>           | 8 Hours @ 75% load   |
| <b>Structure Type:</b>         | Silent               |
| <b>Noise Level (7m):</b>       | 72 dBA               |
| <b>Auto Voltage Regulator:</b> | Constant voltage AVR |
| <b>ISO9001 Certified:</b>      | Yes                  |
| <b>CE Certified:</b>           | Yes                  |
| <b>Fuel Cons. @ 100% Load:</b> | 39.7                 |
| <b>Fuel Cons. @ 75% Load:</b>  | 29.5                 |
| <b>Fuel Cons. @ 50% Load:</b>  | 20.5                 |

| ENGINE DATA                  |                                                    |
|------------------------------|----------------------------------------------------|
| <b>Brand:</b>                | SDEC                                               |
| <b>Model:</b>                | 6HTAA6.5-G11                                       |
| <b>Type:</b>                 | Six cylinder, vertical, water cooled Diesel Engine |
| <b>Starting System:</b>      | 24 Volt Electric Starter                           |
| <b>Auto-Decompression:</b>   | Yes                                                |
| <b>Cubic Capacity (l):</b>   |                                                    |
| <b>Compression Ratio:</b>    |                                                    |
| <b>Rated Power (kW/RPM):</b> |                                                    |
| <b>Fuel Type:</b>            | Diesel                                             |
| <b>Lube Oil:</b>             | 15W40                                              |
| <b>Low Pressure Alert:</b>   | Yes                                                |
| <b>Low Fuel Cut Out:</b>     | Yes                                                |

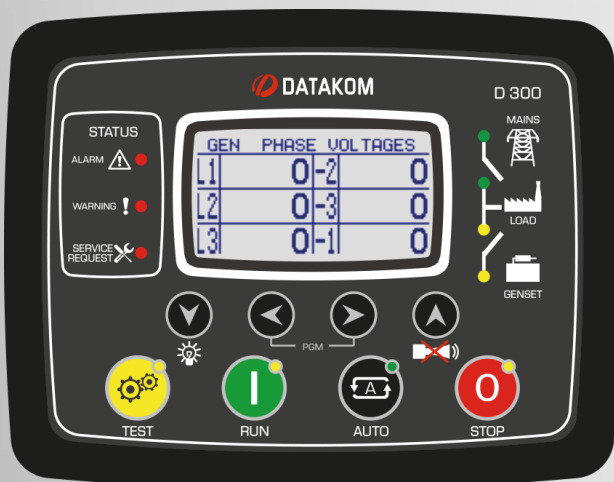
| CONTROL PANEL               |                       |
|-----------------------------|-----------------------|
| <b>Model:</b>               | Datakom D300          |
| <b>Type:</b>                | Digital Control Panel |
| <b>Analogue Inputs:</b>     | 2                     |
| <b>Mains Phase Voltage:</b> | Yes                   |
| <b>Mains Line Voltage:</b>  | Yes                   |

| ALTERNATOR              |                 |
|-------------------------|-----------------|
| <b>Model:</b>           | DPC274G         |
| <b>Pole Number:</b>     | 4               |
| <b>Excitation Mode:</b> | Self Excitation |

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\* Specs subject to change without prior notice.  
 \* Measurements based on ISO8528-1 Standards  
 \* All rating at Sea Level, 25°C Ambient Temp.

# THE NEW D-300 MK3



The D-300 MK3 is a cost effective modular genset controller ready for internet monitoring through plug-in modules.

## FEATURES

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters 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 & fuel theft alarm
- PLC functionality
- DPF regeneration functionality
- 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-485, Ethernet and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring
- Mobile genset support
- Automatic GSM geo-location
- Easy USB firmware upgrade
- -40°C operation with optional display heater
- IP65 rating with optional gasket

## MEASUREMENTS

- Mains & genset PN/PP voltages
- Mains & genset frequency
- Mains & genset phase currents
- Mains & genset neutral currents
- Mains & genset, phase & total, kW, kVA, kVAR, pf
- Engine speed
- Battery voltage

## PLUG-IN MODULES

- GSM Modem (2G-3G-4G)
- Ethernet 100Mbps
- Wi-Fi (802.11 b/g/n)
- RS-485 (2400-57600baud)
- RS-232 (2400-57600baud)

## FUNCTIONALITIES

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

## TOPOLOGIES

- 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2 ph 3 w
- 1 phase 2 wires

## COMMUNICATION

- USB Device
- J1939-CANBUS
- Geo-locating through GSM
- Internet Central Monitoring
- SMS message sending
- E-mail sending
- Free PC software: Rainbow Plus
- Modbus RTU (2400-57600baud)
- Modbus TCP/IP



RoHS

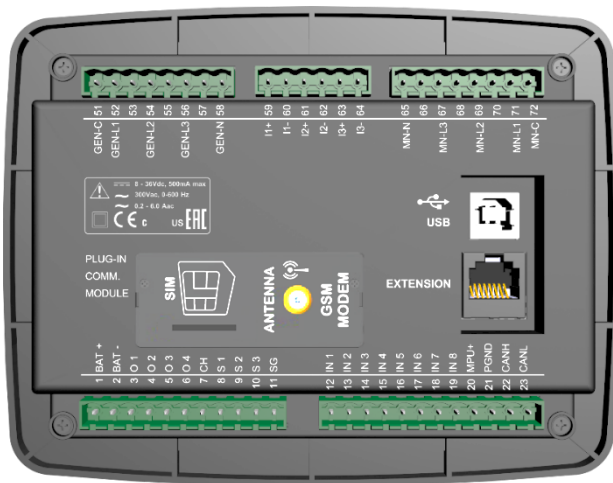
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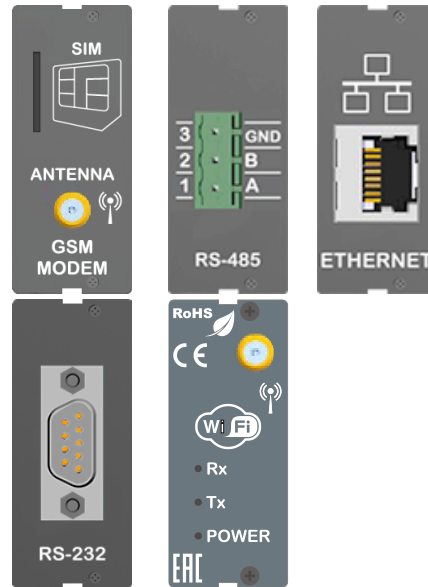
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 DATAKOM

## PLUG-IN MODULES

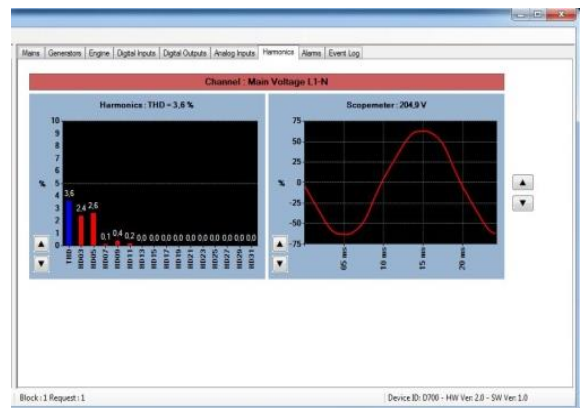
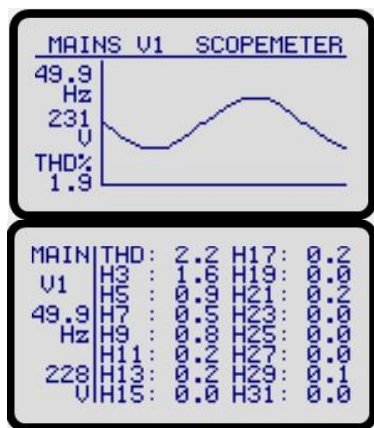


Backpanel view

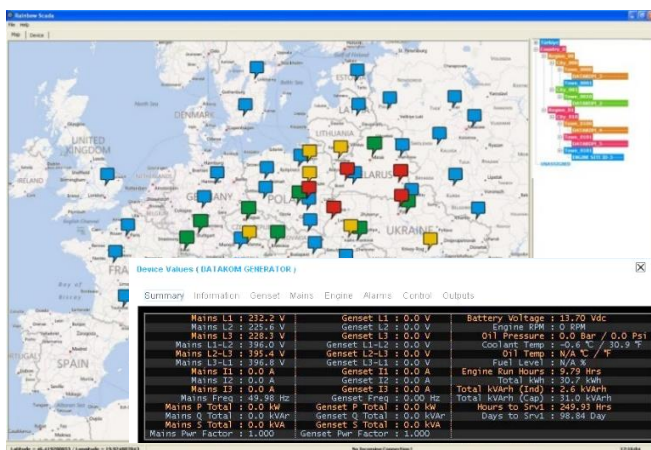


Plug-in modules

## SCOPEMETER & HARMONICS



## RAINBOW SCADA CENTRAL MONITORING

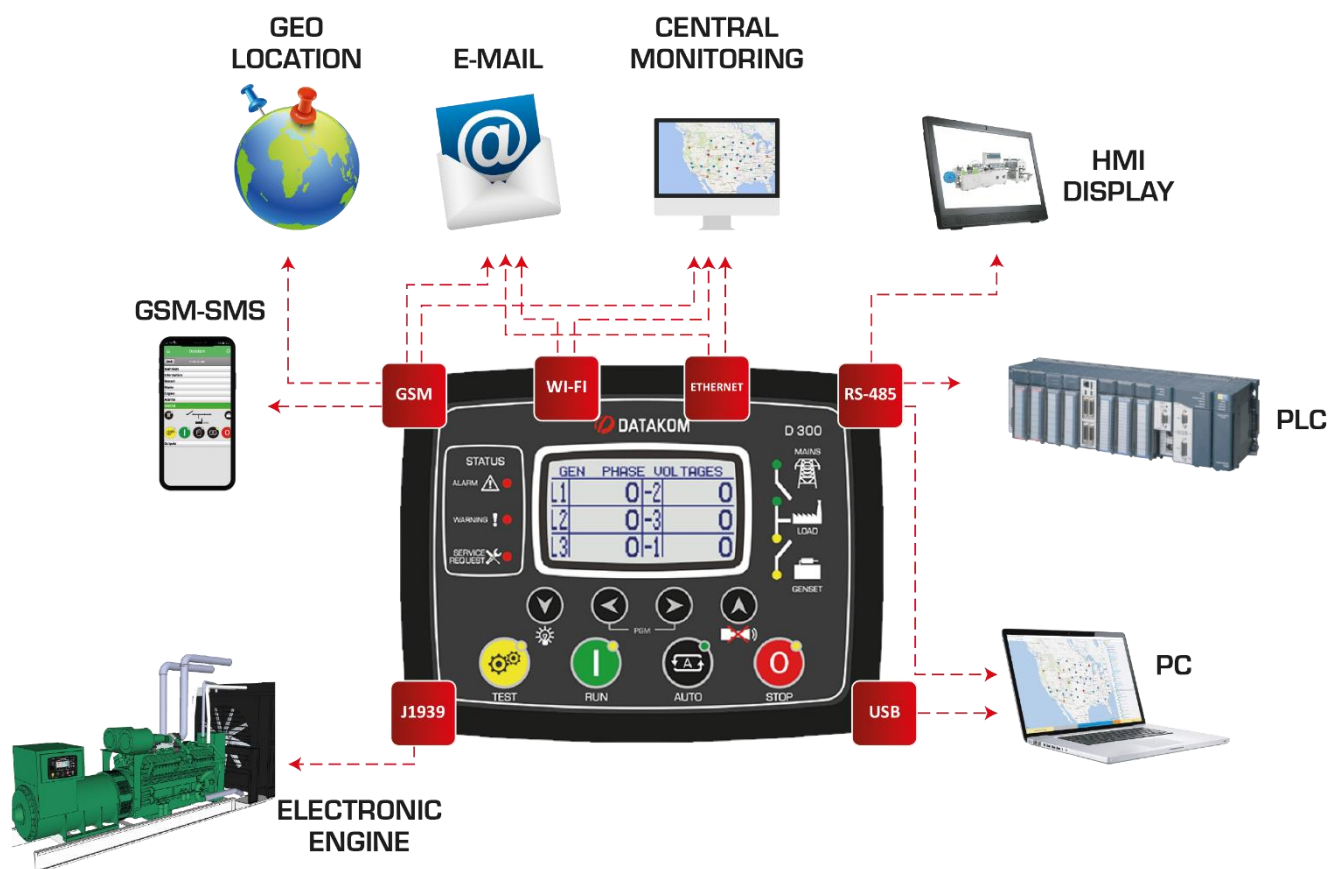


Display on Map, online monitoring



Smartphone Support

## 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:** 180 mA-DC max @ 12V-DC  
**Current Inputs:** current transformers. ..5A or ../1A.  
**Digital inputs:** input voltage 0 to 36 V-DC.  
**Analog input range:** 0-5000 ohms.  
**Mains and genset controller 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 50VAC.  
**Magnetic pickup frequency:** 0 to 10000 Hz.  
**Charge Alternator Excitation:** 2W.  
**Display Screen:** 2.9", 128x64 pixels  
**USB Device:** USB 2.0 Full speed  
**Operating temperature:** -20°C to 70°C (-4 to +158 °F)  
 With optional display heater: -40°C to 70°C (-40 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:** 180 x 140 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**  
 -2014/35/EC (low voltage)  
 -2014/30/EC (electro-magnetic compatibility)  
**Norms of reference:**  
 EN 61010 (safety requirements)  
 EN 61326 (EMC requirements)  
**UL & CSA Compatibility:**  
 -UL 6200, Controls for Stationary Engine Driven Assemblies (Certificate # - 20140725-E314374)  
 -CAN/CSA C22.2 No. 14-13 – Industrial Control Equipment

## TYPICAL CONNECTIONS

