



Local Area Networks (LAN)

Servers

Data centers

Industrial PLCs

Electronic Point Of Sale (EPOS)

Emergency devices (lights/alarms)

Electro-medical devices

DIALOG Dual

3,3-6KVA single/single-phase



The **DIALOG DUAL** range is available in 3300-4000-5000-6000VA models, with on-line double conversion (VFI) technology. The **DIALOG DUAL** range may be placed directly on the floor or mounted in 19" rackmount cabinets such as the Multi Shelter range.

In terms of technology, features (selectable On-line, Economy and Smart Active operating modes), and diagnostics such as the digital display, RS232 and USB interfaces, network adaptor card option and **PowerShield²** software included, **DIALOG DUAL** is easily the best solution for protecting "mission critical" applications requiring the highest levels of reliability.

DIALOG DUAL is ideally suited for a whole range of applications from IT to security.

CHARACTERISTICS

- the UPS can be installed as a floor standing tower or 19" rack mount UPS. The front panel digital display can be pulled out (using the keys provided) and rotated to suite the installation format
- reliable, filtered, stabilised and regulated sinewave output (double conversion technology VFI in conformity with IEC 62040-3 specifications) with filters for atmospheric disturbance suppression
- low noise level (<40dBA) thanks to the digitally PWM controlled ventilation system which is load and temperature dependent, and the use of an inverter with a high switching frequency (>20kHz, above the audible range)
- optional bolt-on maintenance bypass (DLD 500/600 models) to allow service without disruption to the loads
- user selectable operating modes in addition to true on-line mode:
 - Economy Mode: selects Line Interactive VI technology to power non-critical loads from mains and achieve up to 98% operating efficiency
 - Smart Active Mode: the UPS selects automatically whether to operate in On-line VFI or Line Interactive VI mode depending on the stability of the mains supply
 - Emergency: the UPS can be programmed to work only when the mains fails - suitable for emergency lighting
 - Frequency conversion 50 or 60Hz
- output voltage selection: 220-230-240Vac
- auto restart when mains power returns programmed using the front panel or using PowerShield² software
- bypass on: when the UPS is switched off, it automatically goes into bypass mode to charge the batteries





STATUS

1. Normal
2. UPS on mains
3. UPS on battery
4. Load on bypass

5. ALARM

- UPS shutdown (permanent)
- Standby (flashing)

6. MEASUREMENTS

- Input voltage and frequency
- Output voltage and frequency
- Battery voltage
- Output current
- Output load (%)
- Battery charge (%)
- Remaining back-up time
- Internal temperature

CONFIGURATIONS

7. Timer set
8. Frequency selected
9. Voltage selected
10. Operating mode selected

- automatic power down due to minimum load
- end of battery discharge pre-alarm
- delayed start up
- PowerShare output socket (2x10A IEC) functionality on DLD 500/600 models
- guaranteed output quality even with typical distorting IT loads with crest factors of 3:1
- rephasing of load as the UPS has an input power factor close to 1, with a sinusoidal input current
- completely digitally controlled
- automatic bypass with no break in power supply
- use of IMS (Insulated Metallic Substrates) modules

- status, measurements, and alarms available on the standard backlit display
- UPS can be updated digitally (flash upgradeable)
- highly reliable battery performance (automatic and manual battery tests)
- Unique Low Ripple Current Discharge (LRCD) to help prolong battery life
- hot-swap user replaceable batteries
- no limit extendable back-up time using modular design Battery Extension Packs
- increased ride through (without batteries) on mains breaks up to 40ms and for fluctuations ranging from 84 to 276Vac



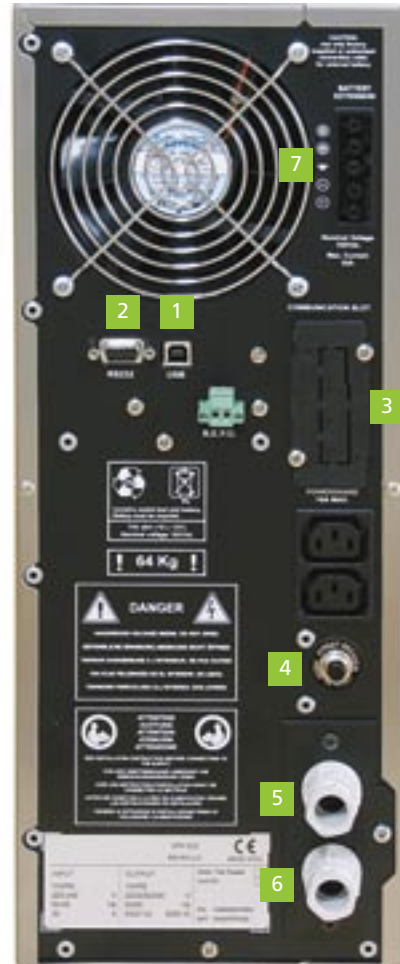
Hot Swap battery



1. USB port
2. Serial port
3. Interface card slot
- SNMP or additional RS232 ports
4. Input thermal protection re-set
5. Input hardwired gland
6. Output hardwired glands
7. Battery extension pack connector

- input protected by resettable thermally activated switch
- Back-feed protection: to avoid current being fed back into the mains should a fault occur
- increased short circuit current on the bypass
- increased overload capacity: 150% on inverter even when mains supply has failed
- performance guaranteed in temperatures up to 40°C
- manual switch over to bypass
- two IEC output plugs with thermal protection (DLD500-600).

MICROSOFT CERTIFIED PRODUCT



Rear panel DLD500-600



Rear panel DLD330-400



DLD330-400 hot swap batteries



DLD500-600 hot swap batteries

ADVANCED COMMUNICATION

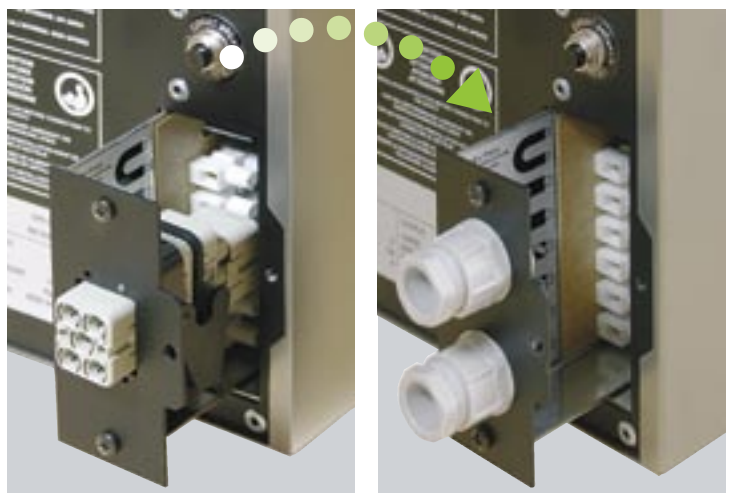
- advanced, multi-platform communication for all operating systems and network environments: PowerShield² supervision and shut-down software included, with SNMP agent, for Windows 95, 98, NT4.0, 2000, 2003, Me, XP, Mac OSX, 9.X, Linux, Novell operating systems. The UPS is supplied with a communications cable for 'Plug and Play' PC connection
- plug & play feature
- USB port
- RS232 serial port
- slot for one of the following interface cards:
 - Network adapter (Netman 102)
 - Multiplexer (Multicom 352)
 - JBUS/MODBUS interface (Multicom 302)
 - RS232/USB card (Multicom 362)
 - RS232/EPO* (Multicom 372)
 - Dry contacts card/EPO* (Multicom 382)
- Microsoft certification.

* EPO is standard on DLD500-600 models.

2-YEAR WARRANTY

External bypass option

Standard connection





MODELS	DLD 330	DLD 400	DLD 500	DLD 600
POWER	3300VA/2300W	4000VA/2400W	5000VA/3500W	6000VA/4200W
INPUT				
Rated voltage	220 - 230 - 240 Vac			
Minimum voltage	164 Vac @ load 100% 84 Vac @ load 50%			
Rated frequency	50/60 Hz \pm 5Hz			
Power factor	> 0.98			
Current distortion	\leq 7%		\leq 5%	
BY PASS				
Voltage range	180 - 264 Vac (selectable in Economy Mode and SMART ACTIVE Mode)			
Frequency range	Selected frequency \pm 5 % (user configurable)			
BATTERIES				
Recharge time	4 - 6 h			
OUTPUT				
Rated voltage	220/230/240 Vac selectable			
Static variation	1,5 %			
Dynamic variation	\leq 5% in 20ms			
Wave form	Sinewave			
Voltage distortion with linear load	< 3%			
Voltage distortion with non-linear load	< 6%			
Frequency	50/60 Hz selectable			
Crest factor	3 : 1			
OVERLOAD CAPACITY				
100% < Load < 110%	1'			
100% \leq Load < 150%	4 s			
Load > 150%	0.5 s			



MODELS	DLD 330	DLD 400	DLD 500	DLD 600
ENVIRONMENTAL				
Efficiency	92%			
Line-interactive/Smart Active Efficiency	98%			
Operating temperature	0 ÷ 40 °C			
Humidity	< 95% non condensing			
Protection	Overload - short-circuit - overvoltage - undervoltage - temperature - low battery			
Compliance	EN 62040-1-1; Directives 73/23/EEC and 93/68/EEC; EN62040-2; Directive 89/336/EEC; 92/31 EEC; 93/68 EEC; EN62040-3			
Colour	metallic grey (silver)			
Noise	<40 dBA at 1m		<45 dBA at 1m	
Accessories provided	2x10A cables; 1xIEC-16A plug; software; serial cable; plastic keys to release display; handles kit		2 cable guides; terminal board connection; software; serial cable; plastic keys to release display; handles kit	
OPTIONS				
Extended runtime solutions	yes (with and without battery charger)			
PowerShield ²	Standard version included (for accessories see software section p. 46)			
Netman 102	yes (for accessories see software section p. 49)			
Multicom 362	yes (for accessories see software section p. 51)			
Multicom 372	yes (for accessories see software section p. 51)			
Multicom 382	yes (for accessories see software section p. 52)			
Multicom 302	yes (for accessories see software section p. 50)			
Multicom 352	yes (for accessories see software section p. 50)			
Multi Pass 16 (hwd) mm/kg	2Ux438x360 - rack version weighs 6,8 (p. 54) 180x300x115 - box version weighs 3,3 (p. 54)		-	
Service bypass flange	-		yes	
Telescopic tracks for rack mounts	-		yes	
Weight (kg)	38	40	62	64
Dimensions (hwd) (mm) tower/rack	455x175x520/175(4U)x483x520		455x175x660/175(4U)x483x660	
Back-up (min)	12*	10*	10*	8*

* According to load applied.