

# UMB DC

## Industrial Modular DC Systems

24/48/60/110/125/220V DC

DC UPS

Borri Modular DC Uninterruptible Power System has been designed for industrial applications from oil & gas, power generation, utilities, water treatment, desalination to transportation, telecom, chemical industries and industrial process control.

UMB has been developed to withstand harsh environment and operating conditions of Industrial applications with state-of-the-art technology providing, reliable and customized system solutions with very low MTTR.

With decades of experience in industrial power solutions, Borri offers complete DC modular UPS systems with highly reliable, robust quality and flexible, longest design life.



## Industrial Power

### Applications

Power Generation.  
Power Utility.  
Oil & Gas.  
Transportation.  
Marine.  
Chemical Industries.  
Other Heavy Industries.

### Main Features

- LCD display and data interface for monitoring.
- Single, N+1 and N+N configurations.
- Hot Swappable Power Modules for very low MTTR.
- Scalability for future power growth.
- Compact 19" design and customized engineering.
- High power density.
- Low Current Harmonics (THDi).
- Wide DC voltage range for Ni-Cad Batteries.
- CE and UL marked Modules.

### UMB DC technical data

General						
DC System Voltage (V)	24	48	60	110	125	220
Module rating (A)	75	42 / 62.5	42	20	20	10
Max Standard rating (A)	1500	840 / 1250	840	400	400	200
Input						
Input voltage	220/230/240 Vac 1-phase $\pm 10\%$ , 380/400/415 Vac 3-phase $\pm 10\%$ , 50/60 Hz $\pm 10\%$					
Power factor / Input THDi	0,99 @ 50% - 100% Load / THDi <5% @ 100% Load					
Output						
DC Voltage range (V)	21.7-28.8	43.2-57.6	54-72	89.2-171.6	89.2-171.6	178.5-297
Operating battery voltage	Floating: 2.27 (VRLA), 2.2 $\div$ 2.3 (VLA), 1.4 $\div$ 1.5 (Ni-Cd) V/cell adjustable Boost: 2.4 $\div$ 2.45 (VLA), 1.5 $\div$ 1.65 (Ni-Cd) V/cell adjustable Equalizing: up to 2.35 (VRLA), up to 2.7 (VLA), up to 1.7 (Ni-Cd) V/cell adjustable					
System						
Cooling	Forced cooled modules					
Colour	RAL 7035 (others on request)					
Protection degree (IEC 60529)	IP 20 standard (optional up to IP54)					
Output Ripple	<2% @ Full Load			<1% @ Full Load		
Efficiency	>92% @ Full Load			>94% @ Full Load		
Environmental						
Operating temperature	-10 °C $\div$ +40 °C (optional up to 55°C with derating) / Storage temperature: -20 °C $\div$ +70 °C					
Altitude	<2000 m (derating according to EN 62040-3)					
Audible noise at 1 meter (dBA)	$\leq 65$					
User Interface						
	Front panel: LCD display, keyboard					
Standards						
	Test and performance: IEC EN 60146-1-1					
Options						
	LED mimic. Customizable status and alarms LED set					

## Main Options

- In-built galvanic isolation.
- Other AC input voltages.
- Additional Input and Output protection breakers.
- DC voltage regulators.
- DC-DC Converters.
- Low Voltage disconnect.
- RS-232 / RS-485 / Ethernet Port / SNMP / WEB Interface.
- Remote control software.
- Built-in DC distribution.
- Built-in Battery Bank.
- Higher protection degrees.
- Special cabinet colours.
- Additional alarms and analogue meters.
- DC Earth fault monitoring.
- Top cable entry.
- Other options on request.

