

# CL210DRM

## 10kVA

Rack Type

IGBT Rectifier

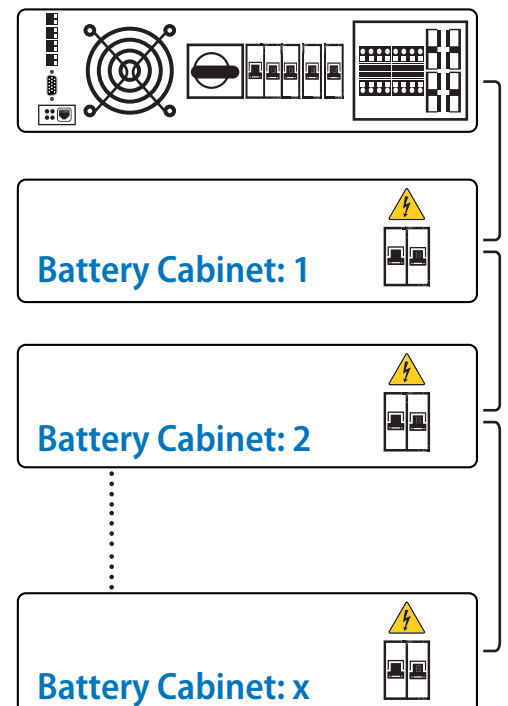
DSP Control



CL210DRM Online UPS has DSP technology that can operate in a wide variety of electrical environments. Its compact design allows Rack and Tower operation with a reversible display for flexibility. With DSP control, efficiency, reliability and functionality have been increased to levels that could not be reached with the old analog technology. It offers solutions for your long-term applications with high charging current and parallel battery connection outputs.

## GENERAL SPECIFICATIONS

- DSP control technology and fully digital structure
- IGBT technology and high efficiency
- Rack type design
- Rack type battery cabinets suitable for 19" cabinet
- High input power factor
- ±340VDC battery voltage
- High output efficiency up to 93%
- Selectable input/output voltage/frequency range
- Maintenance bypass switch
- High charging current capacity
- LCD Panel and mimic led diagram
- Conforms to IEC EN62040
- Conforms to CE, TSE and GOST standards
- ISO9001, ISO14001 compliant production
- Advanced control at the input
- 3 level battery protection
- Heat compensated charging
- Output current limitation
- Output DC leakage protection
- Output short circuit and overload protection
- External REPO input
- 128 events memory (5.000 alarm)
- Clock and calendar (battery supported)
- Automatic battery test, remaining battery time indicator
- 1 RS232 serial port and standard dry contact outputs
- Optional SNMP, MODBUS and Remote Monitoring Panel
- Viewing device operating parameters
- Advanced remote control features
- User and central service password-protected security
- 2 years warranty



## TECHNICAL SPECIFICATIONS

MODEL	CL210DRM
Power (kVA)	10
<b>INPUT</b>	
Voltage	380/400 VAC 3P + N + G
Voltage tolerance	187-253VAC (@ 100% load)
Frequency	50Hz Nominal
Frequency tolerance	40/65Hz
Power factor (%100 load)	≥0.93
THDI (*)	≤ %25
By-pass voltage	220/230 VAC 1 Phase+ N, ± 10
Bypass Frequency	50Hz ± %5
Bypass frequency tolerance (for sync)	50Hz ± 5Hz (adjustable)
Protection	Fuses, High Voltage (Surge Arrester) Protection, Voltage and Frequency tolerance, Input power limitation, Phase reverse protection
<b>OUTPUT</b>	
Power (kW)	9
Power factor	0.9
Voltage	220/2300 VAC 1P + N, ± %1
Frequency	50Hz
Frequency tolerance	Synchronized to the network: ±2% / Free operation: ±0,1%
Efficiency (%100 load)	up to 93%
Crest factor	3:1
Overload protection	100% - 125% load: 10 min, 125% - 150% load: 1 min, - > 150% load: by pass
Other protections	Intelligent short circuit protection, Voltage tolerance protection, DC balance, Regenerative load, Current limiting protections
Voltage THD	≤ %2 (%100 linear load)
<b>BATTERIES</b>	
Type	Maintenance-free dry type
Number of batteries	20 piece (20-28 adjustable)
Charge voltage	± 270 VDC
End of discharge voltage	± 210 VDC
Charging Current (Independent of output load)	3A DC
Battery cabinet	External
External Battery Inputs	Standard (Up to 4 pcs-Socket Type)
Battery ambient temperature	25°C
Protections	3-level alarm, Battery fuses, Charging current limitation (standard) Heat compensated battery charging system (optional)
Battery testing	Standard (Automatic or Manual)
<b>GENERAL</b>	
Standards	EN62040-1, EN62040-2, EN62040-3
User interface	User Interface 2x16 lines LCD panel, Mimic led panel, 5 vector buttons, Buzer
Indicators	Phase-N voltage, Phase-Phase voltage, Current, Power, Crest Factor, Frequency, PF,
Advanced	Self diagnostics, 3 maintenance time indicators, Calibration over RS232, operating hour meter
Communication	RS232 serial port, 3 standard NO/NC dry contacts
Inputs	EPO (emergency shutdown) input
Software	Standard T-Mon UPS Management software (3 users + 1 server management)
Alarm recording	Standard: time & date 128 events (5000 Alarms)
Protector	Power module over-heat protection, Over-current, Heat high alarm
Temperature range	0°C - 40°C
Protection degree	IP20
Power Connections	Klemens
Insurance and Breakers	Inlet, Outlet, Battery and Maintenance Bypass Insurance (Standard)
Relative humidity	90% max. (non-condensing)
Altitude	<2000m. above sea level (at nominal power)
Acoustic level	< 55 dBA
Weight (kg)	36
Dimensions (mm) HxWxD	134x430x625
<b>OPTIONS</b>	
Different input / output voltage	Please ask
Transformer	Galvanic isolation transformer at the input & output
Software	T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 10-50-100-200 clients
Adaptors	SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP), TCP/IP, GSM/GPRS Modem, Comport multiplexer

(\*) Depends on Input/Output voltage conditions and power