

DOMINION

SP1



UPS (Uninterruptible Power Supply)

Digital Signal Processor



CM COMANDOS LINEARES®

Innovation, quality, technology and reliability. Highlights of CM Comandos Lineares solutions

THE COMPANY

With over 38 years of experience, CM Comandos is one of the largest UPS manufacturers in Latin America. In addition, CM is the absolute leader in solutions for the corporate market. Certified by ISO -9001:2015, CM Comandos highlights its commitment to the excellence of its products and the total satisfaction of its clients



APPLICATIONS CM Comandos Lineares' UPSs are suitable for mission - critical applications in a variety of industries, providing protection against electrical power disturbances such as: shortage, micro -cuts, noise, harmonic distortion, peaks, transients, sub and overvoltage and frequency variations .

BENEFITS CM Comandos equipment operates more accurately, adds more features and is the safest. Features that generate high reliability and productivity in the most varied applications, minimize faults and, consequently, maintenance costs. In short, being a CM Comandos client means having the return on invested capital and guarantees that only a company with wide technical assistance can offer .

TECHNICAL SUPPORT By choosing the brand CM Comandos Lineares you have the best pre and after - sales technical support from the company that has consolidated over these 38 years as a market leader. State - of - the - art instrumentation, highly qualified professionals with national coverage and availability of 24/7 service, call center and certified processes ensure the excellence of our support services .



CM COMANDOS LINEARES®

High Technology in Digital Signal Processing - DSP



We live in an increasingly fast and practical world. A world connected by processors, chips, software and peripherals. But that's still not enough. That is why the world is moving towards technologies for immediate data processing. CM Comandos Lineares is one step ahead and provides its customers products with a revolutionary technology called Digital Signal Processing - DSP.

This technology is now present in the most state-of-the-art electronic systems due to its high speed and reliability. Digital Signal Processors are capable of processing ten million samples per second. This means real-time processing - the signal is processed the instant it is received, without delays.

THE MOST MODERN CORPORATE UPS

The entire Dominion SP1 UPS line is powered by DSP technology. A feature that delivers high performance and reliability, making them ideal for mission-critical applications. That is, they protect the applications in which the continuity of the operation is of key importance.

Designed with the intensive use of DSP technology, Dominion SP1 UPSs bring new and advanced features that set a new concept in development in which equipment firmware can be upgraded by adding new features to already installed units.



Dominion SP1 UPS - 8 and 12kVA - Single-phase

Acquiring UPSs, count on the solutions from CM Comandos that ensure state-of-the-art technology, maximum protection, digital accuracy and real-time processing.

Dominion

SP1



ONLINE TECHNOLOGY WITH STATIC MAINTENANCE BYPASS

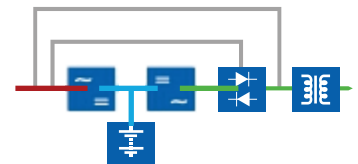
Maintenance Manual Bypass

In this mode of operation, the load is powered directly by the alternative Bypass circuit that enables complete shutdown of the equipment, so that maintenance can be carried out with parts and boards without the need for shutdown. With the help of the static key, after maintenance, it is possible to transfer the UPS to normal mode while keeping the load always powered.

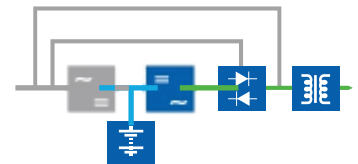
Static Bypass

Protection system which, transfers the load automatically to the Bypass line with no output interruptions in case of failure and operates in phase synchronism.

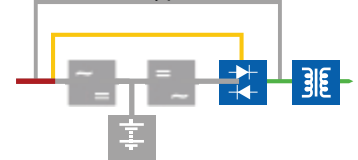
Active Power



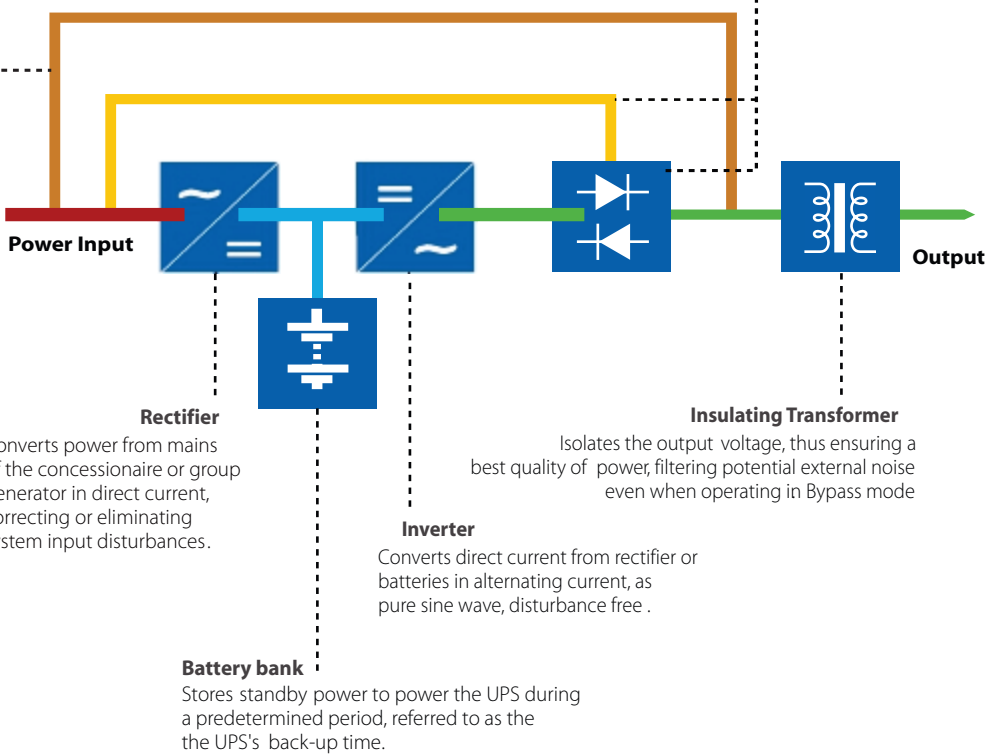
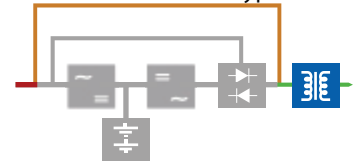
Power Failure



Static Bypass



Maintenance Manual Bypass



■ Input Alternating Current ■ Output Alternating Current ■ Manual Maintenance Alternating Current Bypass
■ Direct Current ■ Static Bypass Alternating Current

MAIN FEATURES

Advanced DSP Technology (Digital Signal Processor)
Enables advanced and exclusive real-time functions.

Internal Memory for Event Logging
Allows them to be tracked for analysis.

True RMS Measurements with Multimeter Accuracy
Ideal for measuring non-linear loads.

Input Power Factor Correction 99.9%
Acts as a filter for non-linear loads.

DSP Processor Driven
The maneuvers are recorded in the event log.

Possibility of DSP Firmware Upgrade
Ensures upgrade and preservation of investment.

Voltage Adjustment Software
High accuracy and reliability.

Static Bypass and Bypass Maintenance Manual
They add protection and increase the reliability of the sensitive load.

Remote Real-Time Management Via Internet*
Via TCP/IP and firewalls with password protection for remote access.

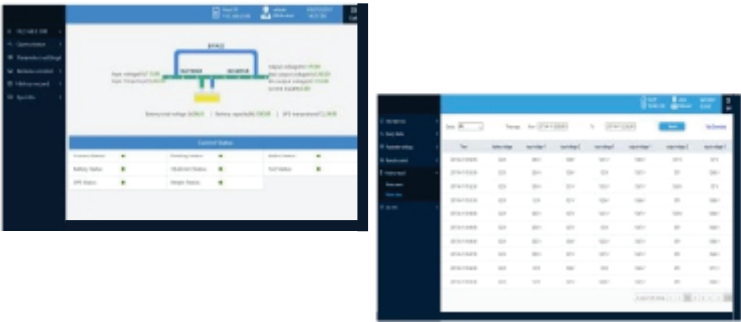
Compatible with All Gensets
Accuracy and total protection for generator set operation.

REMOTE MANAGEMENT INTERFACES

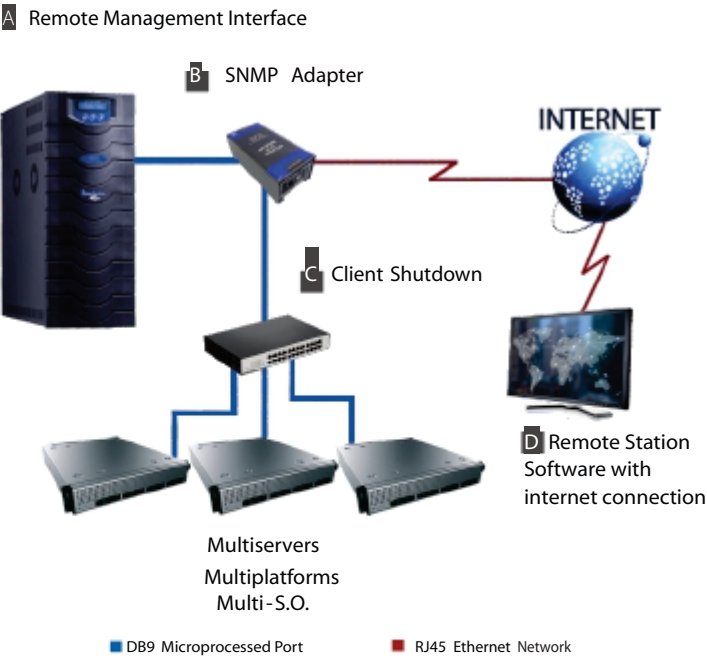
They are composed of several tools. The NetMate SNMP Adapter allows you to remotely manage the UPS via the Internet through a web browser, monitor status and send alerts via email.

IP Power software is a Windows Application management tool and the Client version is specific to automate shutdown servers, and can automatically and simultaneously shutdown several servers and workstations .

The ArmModbus Adapter allows the integration of the UPS by means of a RS485 port, to Building Automation Systems through the Modbus protocol.



SHUTDOWN INTERFACES AND REMOTE MANAGEMENT



PERMANENT EVENTLOG

DSP stores the events in its EEPROM memory. It works as a "black box", it is possible to trace the values of the measurements and the position of the internal keys, reporting any operational errors.

POWER FACTOR CORRECTION

Known by the acronym PFC-Power Factor Correction, this system allows the Input Power Factor of the UPS is 0.99 - correcting the effects of -nonlinear loads and harmonics connected at the output of the UPS.

TECHNICAL DATA

Technology

- On-Line - Double Conversion
- Rectifier - Inverter - Battery Bank
- Insulated Static Bypass
- Digital Control Microprocessor DSP
- Inverter to High Frequency IGBT
- Firmware Upgrade

Input

- **Voltage:**
 - 220 / 208 / 230V
- **Permissible Variation:**
 - $\pm 15\%$ of nominal voltage
- **Frequency:** 50 ou 60 Hz
- **Permissible frequency variation:** +6% - 4%
- **Setting:**
 - Single phase: F + N + T
 - Two- phase: F + F + T
- **Power factor:**
 - 0,8
 - 0,99*

Output

- **Voltage:**
 - 100 / 110 / 115 / 120 / 127 / 208 / 220 / 230V
- **Available Power:**
 - 3,75 / 6,25 / 8 / 12 kVA
- **Static Regulation** $\pm 1\%$ nominal
- **Frequency:** 50 ou 60 Hz
- **Frequency Variation:** $\pm 0,05\%$ en modo batería
- **Setting:**
 - Single phase: F + N + T
 - Two-phase: F + F + N + T
- **Power Factor:** 0,8
- **Waveform:** sine
- **THD Harmonic Distortion:** lower than 1%, total
- **Crest Factor** 3:1
- **Overload Capacity:** 125% durante 25s
- **Performance:** 90%

Baterías

- **Line Voltage:** 192 VDC
- **Recharge System:** controlled, automatic
- **Recharge Time:** 8 a 10 hours for 90% da charge
- **Type:** sealed, maintenance-free

Static Bypass

- **Drive:** automatic, DSP controlled
- **Transfer Time:** 0ms (null)
- **Retransfer to Normal Mode:** automatic.

Manual Bypass Maintenance

- Allows maintenance of the UPS without disconnecting the charge
- **Reset to Normal Mode:** no interruption

Electrical Protection

- Input and Output Undervoltage and Overvoltage
- DC and battery Undervoltage and Overvoltage
- Overload and Short Circuit
- Minimum Battery Discharge

Measurment

- True RMS
- Output power in kVA
- Output power in kw
- Output power factor
- Output Voltage
- Output Current
- Output Frequencies
- Battery Voltage
- Input Voltage
- Input Frequency

Alarms

- **Controlled by the processor**
- **Types of Alarms:**
 - Sound:
 - » Power Grid Failure: 1 ring per second
 - » Battery Pre-alarm: 2 rings per second
 - » UPS Internal Failure
 - Alert Messages:
 - » Liquid Crystal Displat
 - » IP Power Software via TPC/IP*
 - » Message by email*:
 - Normal Operation
 - Network Failure
 - Pre-alarm of Batteries
 - Static Bypass
 - Manual Bypass
 - Output Overload
 - Internal Failure

Log Event

- **Log Stored:**
 - EEPROM memory log
 - Date, time and event indication
 - Measurements
 - Panel operation and alarms status
 - Status of Internal Keys

Physical and Mechanical Characteristics

- Compact size
- Display: LCD - backlit liquid crystal
- Case Structure:
 - Rack: metallic
 - Front panel: in higs strength ABS
 - Tremovable side and top covers
 - Afinishing: Epoxy powder paint in graphite color with heat and anticorrosive treatment
- Moving: by self-supporting castors
- Castors with latches*
- Insulator Tranformer (electostatic shield*)
- Communication Port
 - Serial RS232C Insulated Full Duplex - Db9 Female
 - Dry Contact DB9 Female

Management Interfaces

- Single - User and Multi-User, client-server and multi-server
- Vmultiple servers on a single UPS
- Shutdown and management Tools
- Protocols:
 - Serial RS232
 - Serial RS485*
 - SNMP / Telnet / http / TCP/IP*
- Managent Software*
 - IP Power e IP Power SE
 - SNMP NetMate Adapter
 - ArmModbus Rs485 Adapter
- Ambient and Operating Systems
 - Windows 8 / 10 / 2010
 - Linux *

(Trademarks of the respective manufacturers)

Model	Power kVA	Physical Dimension h x w x d mm	Weight (with batteries)
3750	3,75	787 X 280 X 647	122
6250	6,25	787 X 280 X 647	153
8000	8,00	815 X 480 X 875	254
12000	12,00	815 X 480 X 875	319

* Optional



Audited
Sustainability System



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