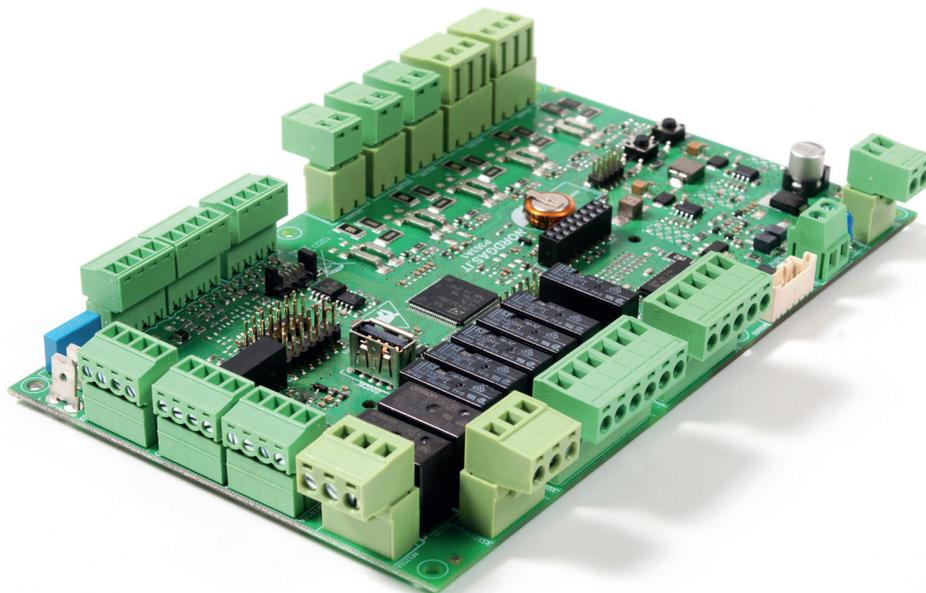


CASCADE MANAGER

CM30

CASCADE MANAGER SYSTEM

High safety Standard (CE approved)
CEI EN 60730 / CISPR 14-1 / En61000
ErP 2005/32/CE - 2009/125/CE



APPLICATIONS

The “Cascade manager” has been designed to manage a modern heating and domestic hot water system with boilers in battery, capable of optimizing overall performance in order to ensure maximum efficiency, reduction of energy costs and ease of maintenance.

The board is equipped with the art of state about I/O and communication peripherals reducing the needed of other external devices.

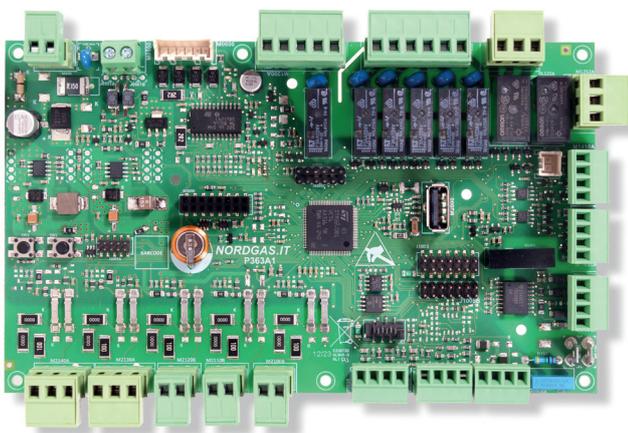
The “cascade manager” platform can manage up to 24 boilers simultaneously, even with different powers, through a digital communication line, up to 3 mixed high/low temperature zones and solar system.

The “cascade manager” is provided with a high-level external graphical user interface. The user can configure inputs/outputs, setpoints, modes and many other parameters by means of an easy and friendly user interface provided with icons and messages in several different languages.

Thanks to its high flexibility, the “cascade manager” can be hardware configured to create a customer tailored model to satisfy each system requirement.

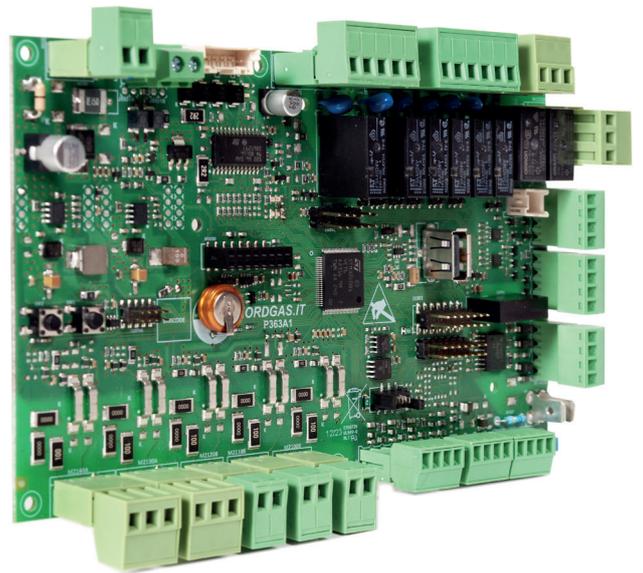
A USB-HOST port is provided by default on the board. Using a USB-key it is possible to perform some operations like firmware updating, reading/storing parameters and data logging.

Thanks to its communication lines, it can be expanded connecting other “cascade manager” platforms to build an advanced cascade system.



GENERAL FEATURES

- Cascade manager supervisor for Burner Control, Solar and zoning
- Up to 24 boilers handled
- Handling boilers with different powers
- Up to 3 mixed High/Low temperature zones
- Up to 2 Domestic hot water tanks handled
- Solar integration
- Automatic boilers rotation
- Simultaneous handling of Central heating and domestic hot water
- High performance external graphical user interface provided
- Fully configurable inputs and outputs functionalities
- RS485 Half-duplex isolated Modbus interface for connection to boilers
- Up to 2 RS485 Half-duplex Modbus interface for remote expansions and external supervisors
- Firmware update via USB HOST port capability
- Parameters reading/storing via USB key
- Data logging storing on USB key
- Standard industrial Low voltage power supply
- Support WiFi® /BLE communication capability
- DIN Rail 179,5x108mm PCB board dimensions



ACCESSORIES

The **CM30** family can be interfaced with the following accessories:

- External Dot matrix user interface **KVAR series**
- Zone managing
- Remote Control **IoTherm**
- Outside temperature sensors **EXT10** series
- Contact temperature probes **TEM10** series
- Immersion temperature probes **IMM10** series
- Wirings according to customer specifications

MAIN FEATURES		CM3098
Power Supply	External +24Vdc 30W power supply input	✓
	External 24Vac 30W power supply input	○
Analog input	Analog inputs for: NTC temperature probes	4
	Analog input for: [NTC][PT1000][0..10V][4..20mA ⁽¹⁾]	1(NTC)
	Analog input for: [NTC][PT1000]	1(NTC)
	HW/FW user configurable channels: [24Vdc digital input][NTC][PT1000][4...20mA][0...10Vdc]	-
Digital input	Digital contact inputs: [@24Vdc][@115Vac][@230Vac]	3(24Vdc)
	Digital contact inputs: [@24Vdc][@115Vac][@230Vac][Flow Meter ⁽²⁾]	1(24Vdc)
	Digital contact inputs: [@24Vdc][@115Vac][@230Vac][Analog Pressure sensor ⁽³⁾]	1(24Vdc)
Digital output	Relay SPST contact (with common) 230Vac-3A protected	5
	Relay SPDT contact 230Vac-3A	2
	Relay SPST free contact 230Vac-3A protected [PWM + HS for pump interfacing]	1(Relay)
	24Vdc [Bipolar stepper motor output driver][Unipolar stepper motor driver]	1(BIPOLAR)
I/O	PWM + HS	-
	On-board status leds	2
	On-board push buttons	2
	Serial communication for user interface	✓
	RS485 Modbus half-duplex isolated	1
Communication	RS485 Modbus half-duplex	2
	Opentherm slave BUS (Plus)	1
	On-board USB HOST port for firmware upgrade, settings and data logging	1
	Digital interface for external WiFi/BLE 802.11 b/g/n 2,4GHz module	○ (1)
User interface	External	✓

⁽¹⁾ Passive connection. No power supply provided.

⁽²⁾ +5Vdc/+12Vdc/+24Vdc Power supply provided.

⁽³⁾ +5Vdc/+12Vdc/+24Vdc Power supply provided. Pressure switch also handled.

✓ = included
○ = On request
- = Not provided

Rev. 03/2025 - We reserve the right to make changes without prior notice