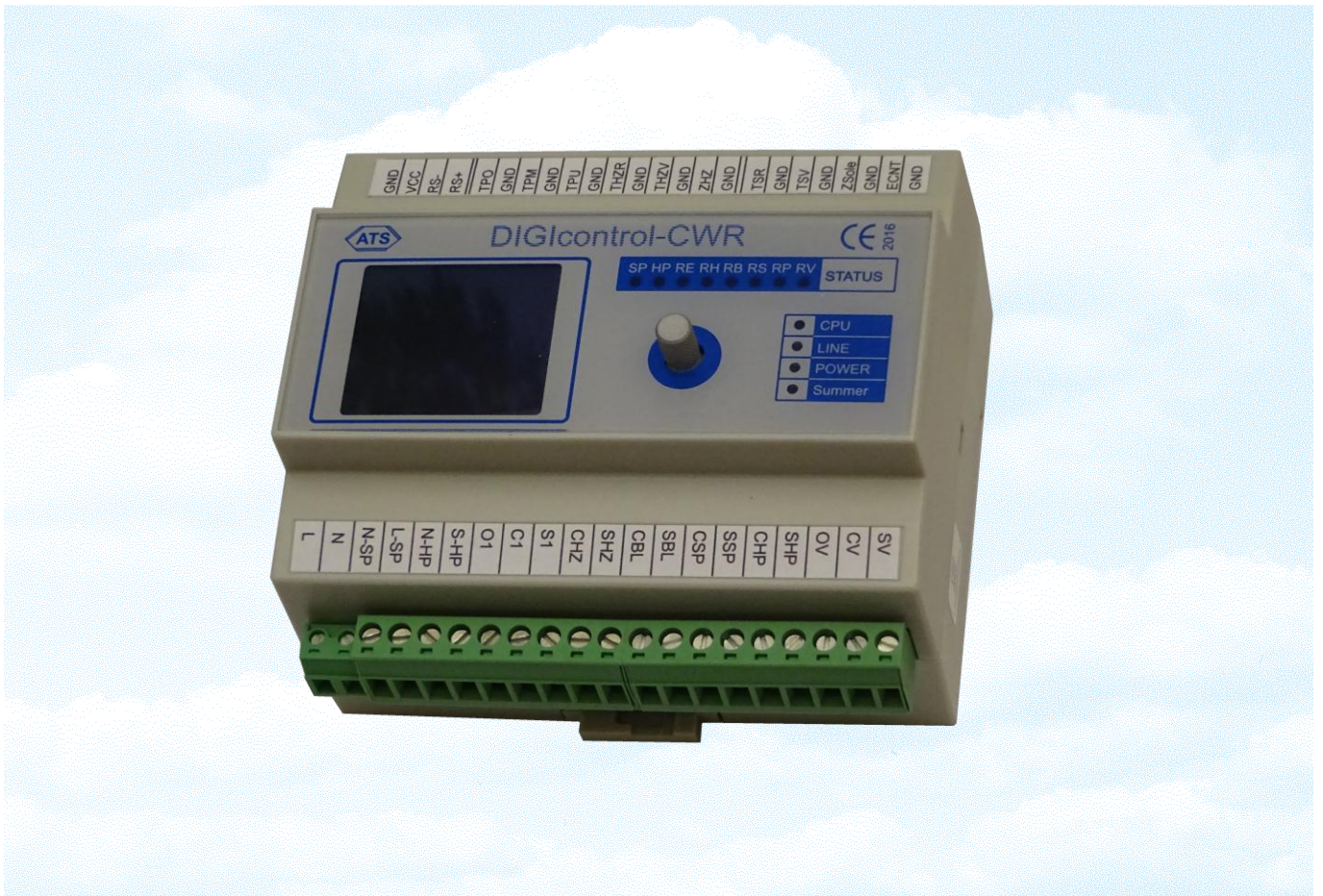


Regulation

Thermal management



## DIGIcontrol-CWR

- Heat/cooling & energy meter with PID regulation
- 1 counter input for electrical energy
- 2 heat meter each with 2 PT1000 and one flow meter input
- Thermal capacity correction tables of measured fluid
- 3 additional analogue PT1000 input channels
- PID regulator with 2 relays 230VAC/10A for mixer control
- 5 power relays 230VAC/10A
- 2 power monitor inputs for 230VAC
- CMOS Clock & super cap to save meter values on power fail
- Jog dial for service control and manual overwrite
- Configurable display for inputs, relays & info
- Internal 90-230VAC power supply
- V4 analogue reporting system, SD-Card for long time storage

# DIGIcontrol-CWR

# heat/cooling meter and control

Experience DIGIcontrol-CWR the new combined dual heat/cooling and electrical energy meter with integrated PID regulation. DIGIcontrol-CWR is an ideal unit to control all energy flows of a heat pump or heat distribution panel and also to realise weather compensated flow temperature control.

The counter input could be used to measure and report electrical power consumption over electrical meters with pulse output.

Two heat meters are realised each with two PT1000 and one counter input. A calibration function and a loadable correction table for the thermal capacity allows correct measurement of nearly every type of water mixture (ethanol, ethylene- or propylene glycol...).

Three additional input channels for PT1000 allows all kind of additional temperature monitoring.

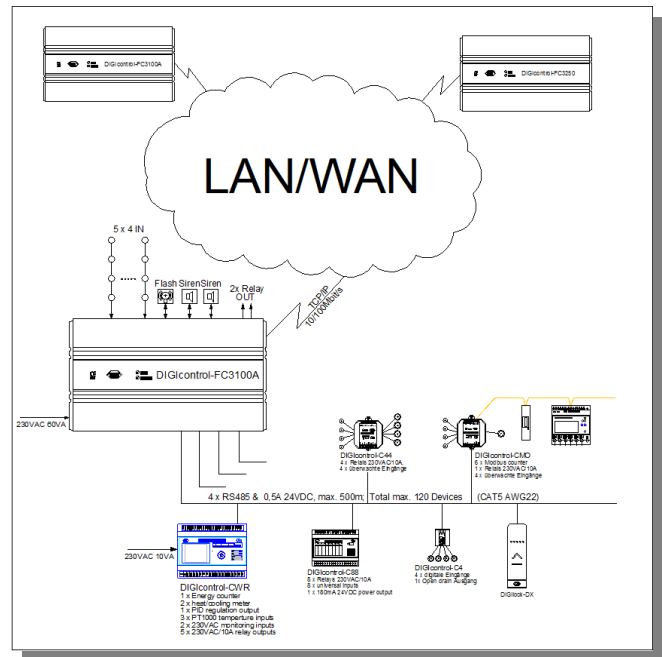
An CMOS clock with super cap and EERAM ensure safety of all counters in case of power fail. Using an SD-Card slot, allows long time recording of all measured data, even when device is offline.

V4 analogue reporting system with individual intervals for actual-, mean, min. & max value of each input. A special power reporting system features current energy distribution and energy counter reporting. Measured values can be corrected with offset and divide factor.

7 power relays with status feedback can be controlled by application or by manual overwrite with local jog-dial or host SW command. Relay status and manual overwrite is shown by dual colour LED and on LCD-Display.

The device is powered with an integrated 15W 90-250VAC power supply or external 24VDC to prevent high bus power load from relays. The CPU is always powered over the bus to allow reporting of power fails.

The 1.8" DIGIcontrol-CWR LCD and jog dial allows easy diagnostic and maintenance. It shows energy values, temperatures, input and relay status. Relays can be set by jog-dial to manual overwrite with on, off or auto mode. Host manual overwrite has same priority as jog-dial. An additional info page allows showing network system values like outside temperature or system wide power consumption.



## Technical Data:

### DIGIcontrol-CWR

32-bit ARM Cortex-M4 & ARM Cortex-M0+ CPU (Display)

Memory: 512kb Flash & 64kB SRAM

Real time clock with super cap & EERAM

7x 20Bit low power ADC

IBB network interface

1 counter input for electrical meters with S0 interface

2 heat/cooling meters each with 2 PT1000 & 1 counter input

3 additional PT1000 inputs with configurable offset

7 Relay 230VAC/10A with manual overwrite & feedback inputs

12 Dual-LED's for relay & module status

1.8" colour graphic 128x160 pixel LCD-display with backlight

Jog-Dial for LCD & relay control

Supply: 90-250VAC 15VA

10-28 VDC from IBB Supply current: 40mA max.

for continues CPU operation in case of power fail

V4 analogue reporting system

2 internal service inputs for supply, output and bus voltage

Operating temperature: -10° to +45°C

Dimensions: W108 x H85 x D61 mm, DIN-Rail mounting

## Delivery Contents:

DIGIcontrol-CWR complete with installation and wiring instructions.

Information contained in this document is correct at the time of publication (150819) is subject to change without notice.

**Austrian Technical Systems**

**ATS**

Werk Wienerwald +43-2238-700-05, Fax +43-2238-700-05-210 <http://www.ats.co.at> mail: [sales@ats.co.at](mailto:sales@ats.co.at)