

UCWEB

Web interface for room controllers



Summary

UCWEB is a communicator for remote control and monitoring of integrated room controllers UC....

Application

- remote monitoring and control of individual rooms
- setting of setpoints, time schedulers and operation modes
- energy demand signals for heating and cooling sources based on demands of individual rooms
- alarm messaging per e-mail
- optional signalisation of one or two binary signals and control of one or two relays over the Internet.

Function

UCWEB is an Ethernet communicator providing one RS485 serial port to connect bus with the UC... controllers, and one Ethernet interface for web access to the data from the controllers. The controllers are accessed over generic web pages with three access levels (read only, change values, service and setup), actual values, set-points, and time schedulers. Passwords for all levels are definable.

No tools are necessary for installation of new controllers, the devices are self-addressable over the web interface. They are added one after another to the bus and UCWEB re-addresses them to avoid address conflicts.

UCWEB also incorporates two digital inputs DI1 and DI2 for dry contacts, and two relays. The contacts can be configured as:

Central off: after the contact is activated (e.g. from security system or central switch at the door) all controllers go to the Off mode, for long-term unoccupancy

Alarm: alarm symbol (bell) is displayed on the displays of the controllers and alarm e-mail can be sent, used for alarm messages

Fault: maintenance symbol (spanner) is displayed on the displays of the controllers and alarm e-mail can be sent, used for technology fault or maintenance messages

Boiler operation: heating source symbol is displayed to indicate boiler operation

Change-over: if a heat pump with change over function is installed and radiators are used both for heating and cooling, this signal switches the controllers into the cooling mode. A cooling symbol is displayed on the displays and the control sequences switches to cooling. The input reads signal either from the heat pump or from a strap-on thermostat installed at the water supply into the secondary circuits.

Relay 1 switches with heat demand from the controllers (with adjustable delay 0..60 min).

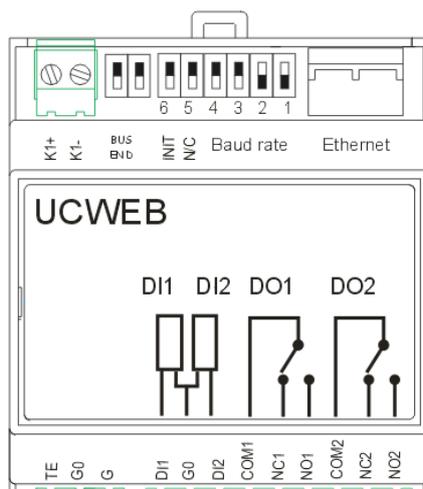
Relay 2 works either as an alarm relay (temperature in the rooms drops under a certain level) or can be controlled remotely – used for remote control of any suitable device (lights, watering, DHW etc.).

The RS485 interface is fully galvanically separated.

Technical data

Power	10 V ÷ 35 V DC, 14 V ÷ 24 V AC, any polarity
Consumption	3,5 W
Temperature range	-30 ÷ 80°C
Communication with UC..	1200 ... 115 200 bit/s RS485, SW data flow control
Ethernet	auto 10 or 100 Mbit/s
IP addressing	fixed or assigned by a DHCP server
Communication with the web client	HTTP, TCP port 80, server
Memory	2MB Flash, 8MB RAM
Digital inputs	2x for voltage-free contact (12 V, 4 mA)
Digital outputs	2x C/O relay: 5A/250 V AC, 5A/24 V DC, 750 VA, 90 W
Dimensions	71 (w) x 90 (h) x 58 (d) mm

Terminals



DIP switches

Baud rate

1,2,3:	4:	
000 1200 bps	0	8 bit
100 2400 bps	1	9 bit
010 4800 bps		
110 9600 bps		
001 19200 bps		
101 38400 bps		

LED:

POWER power presence

RUN flashes = program function is OK

RXD receive data at RS485

TXD send data at RS485

UCWEB is installed on a DIN rail, usually in a panel or box with 24 V AC power supply for room controllers.