

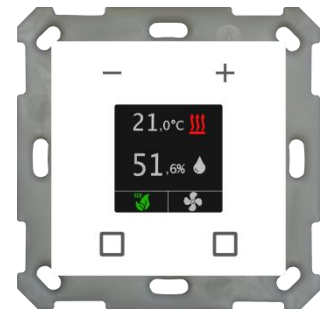
Room Temperature

- Controller Smart [SCN-RTRxxS.01]
- Extension Unit Smart [SCN-RTNxxS.01]

The push-button with active colour display is available in the following variants for systems with 55 mm and 63 mm:

Room Temperature Controller Smart [RTR]

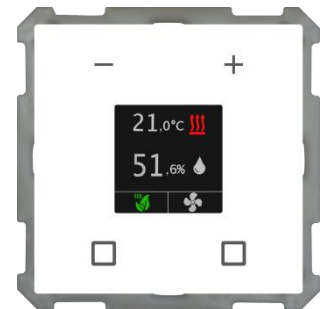
The permanently assigned [+] and [-] buttons above the colour display are convenient and intuitive to adjust the setpoint of the integrated temperature controller. The actual temperature required for control, is measured by the internal temperature sensor. The additional humidity sensor enables the calculation of the dew point. Potential-free contacts can be connected via 4 binary inputs.



SCN-RTx55S.01

Room Temperature Extension Unit Smart [RTN]

The MDT Room Temperature Extension Unit Smart with integrated temperature and humidity sensor provides the actual temperature value and is used for the setpoint shifting of an external temperature controller, for example the MDT Heating Actuator AKH. The Extension Unit can also be operated as a second device in conjunction with the Room Temperature Controller Smart.



SCN-RTx63S.01

Temperature controller (only SCN-RTRxxS.01)

The range of functions extends from simple heating control to the complete air conditioning of a room. The control can be done either via a 2-step control, a switching PI control (PWM) or the continuous PI control. The Room Temperature Controller Smart supports one- and two-circuit systems. Air-conditioning systems with a common pipe system as well as systems with two separate pipe systems for heating and cooling are possible.

Humidity sensor

In addition to the temperature sensor, the device has a built-in humidity sensor. The relative and absolute humidity can be measured, the dew point temperature can be automatically determined and a dew point alarm can be triggered.

Active colour display

The active colour display can be continuously adjusted in brightness via a 1-byte (%) or 2-byte (Lux) object. The appearance (white text on black background or inverted) is individually adjustable for day and night and the colours of the symbols are free selectable.

Binary inputs (only SCN-RTRxxS.01)

Window contacts or conventional light/blind push-buttons, for example, can be connected to the 4 binary inputs for potential-free contacts. Functions such as *switching*, *short/long switching*, *dimming*, *blinds* and *sending values/states* are possible with individual or grouped inputs.

Buttons

The [+] and [-] buttons above the display are permanently set to setpoint shift. The two lower buttons can be parameterised individually. In addition to the internal functions such as *operating mode*, *ventilation control*, *control value = 0%* and *heating/cooling switchover*, *external functions* such as *switching*, *short/long switching*, *dimming*, *blinds* and *sending values/states* can be set for each individual button.

Ventilation control

Up to 4 fan stages can be controlled. The control can be done either via the control value of the temperature controller, by means of the temperature difference between the setpoint and actual value or via the relative humidity. Furthermore, the day/night function ensures individual setting of the ventilation according to the time of day. A sticking protection is available to protect the ventilation system.

Diagnosis (only SCN-RTRxxS.01)

The Room Temperature Controller Smart has a 14-byte diagnosis object. The output is in plain text.

Updateable via DCA App

If necessary, the RTR and RTN can be updated via the MDT Update Tool (DCA). The download is available free of charge at www.mdt.de and www.knx.org.

Long Frame Support

The MDT RTR and RTN support "long frames" (longer telegrams). These contain more user data per telegram, which significantly reduces the programming time of the actuators with the ETS.