

# Data point list Modbus RTU

SmartBoard 1.024/1.124

## Modbus interface:



Transmission type:	Modbus RTU	<b>Note:</b> The settings of the Modbus interface are fixed and can NOT be adjusted!
Baud-Rate:	9600	
Parity:	None	
Bits:	8	
Stop-Bits	2	

## Modbus-Data point list:

parameter	Data point description	Protocol address	Register address	Directorate	Resolution	Option
SV01	Temperature sensor AI1	70	40071	RO	1/10	°C
SV02	Temperature sensor in the RBG	71	40072	RO	1/10	°C
SV03	Temperature sensor AI2	72	40073	RO	1/10	°C
SV04	Temperature sensor AI3	73	40074	RO	1/10	°C
SV05	Control sensor	74	40075	RO	1/10	°C
SV06	Room temperature of GA	75	40076	RW	1/10	<b>DIP 6 = OFF!</b> °C - Sensor value of GA (virtual)
SV08	Fan speed	77	40078	RO	1:1	0-100%
SV17	Mode	198	40199	RW	1:1	<b>DIP 4 = OFF!</b> 0 = Automatic 2 = Cooling 4 = Ventilation 5 = Heating
SV18	Fan	199	40200	RW	1:1	0 = OFF 1 = Lüfterstufe 1 2 = Lüfterstufe 2 3 = Lüfterstufe 3 4 = Lüfterstufe 4 5 = Lüfterstufe 5 6 = Automatic
SV20	Devices On/Off	201	40202	RW	1:1	0 = OFF; 1 = ON (lock/release)
SV23	Master alarms	204	40205	RO	1:1	0 = no malfunction 1 = control sensor faulty 2 = local stop (motor fault) 3 = room frost protection 4 = condensate alarm 5 = general alarm 6 = sensor AI1, AI2, or AI3 faulty 7 = unit frost protection 8 = EEPROM faulty
SV28	Digital Messages	209	40210	RO	1:1	Bit 0 → 1 = input DI1 Bit 1 → 2 = input DI2 Bit 2 → 4 = Input AI1 Bit 3 → 8 = input AI2 Bit 4 → 16 = Input AI3 Bit 5 → 32 = heating demand Bit 6 → 64 = cooling demand Bit 7 → 128 = reserved Bitwise evaluation Example: Value = 33 (1+32=33) - DI1 = closed (1) - Heating requirement active (32)
SV29	Switching Tag/Eco	210	40211	RW	1:1	0 = day - comfort operation 1 = Eco - setback mode
SV30	Temperature setpoint	211	40212	RW	1:1	°C - step size 1K, e.B. 22°C
P001	Basic Setpoint	1	40002	RW	1:1	Basic Setpoint KaController operation ±3K

All data points marked in **red** are absolutely necessary if the KaController room control unit is not used! All other data points are optional.

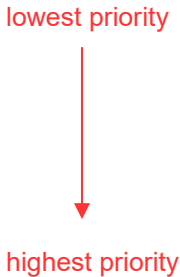
## Important information:

- Example register address:

Register address 40202 → 4 | 0202

Holding Register | Address 202



- All data points marked in **red** are absolutely necessary if the KaController room control unit is not used! All other data points are optional.
- In the data point "SV23 Master alarms" only the error with the highest priority is displayed
  - 0 = no malfunction
  - 1 = control sensor faulty
  - 2 = local stop (motor fault)
  - 3 = room frost protection
  - 4 = condensate alarm
  - 5 = general alarm
  - 6 = sensor AI1, AI2, or AI3 faulty
  - 7 = unit frost protection
  - 8 = EEPROM faulty
- The operating mode (SV17) can only be written via Modbus if the dip switch 4 on the board is set to "OFF". If the dip switch 4 is set to "ON", the operating mode is switched between heating and cooling via the digital input "DI2" and switching via Modbus is not possible.
- **Note:** If the room temperature is used by the GA/GLT system, the dip switch 6 must be set to "OFF". In addition, a room temperature sensor must be clamped between the terminals "AI1" and "GND" or alternatively a 10kOhm resistor must be used. The 10kOhm resistor is used to simulate a connected room sensor so that no error message (sensor defective) appears.
- If no KaController (Kampmann room control unit) is used, a 1kOhm resistor between "V+" and "GND" must be used on the master device in order to define the device as the master.