Core

Core is the control unit, the brain of the system. The three bus terminals on the Core are configurable for the TapHome bus or for Modbus without the need for additional separate gateways.

Features
- Linux computer
- 3 universal bus terminals for:
    - TapHome IO modules. One terminal can handle a maximum of 32 bus modules.
    - ModBus RTU/TCP for third-party devices such as HVAC.
- 6 universal inputs configurable for:
    - NTC temperature inputs with resistance measurement range 100Ohm-100kOhm +-50Ohm. Measurement deviation on 1 km Cat6 cable: -0.3°C at 25°C.
    - Button inputs
    - Status inputs
    - Pulse counter inputs, frequency 100 Hz per channel, sampling rate 200 Hz per channel, on time > 5 milliseconds
    - Analog 0-10V inputs with 0-12VDC voltage measurement range, single-ended type, 8-bit resolution, 0.1% full-scale accuracy, input impedance > kOhm, normal mode rejection 50 dB at 55 Hz, conversion time 1250 milliseconds
    - For 4-20mA analog input, a 500Ohm resistor must be connected and set to 2V in the Service Settings of the input minimum voltage
- 6 outputs with open collector, maximum current 600mA @ 30VDC for each output, maximum 2A continuous on all outputs together
- LAN port
- 24VDC +-10% power supply
- Power consumption 7W *Operating temperature: 0 - 45°C
- DIN rail, 4 modules. Width 72 mm, height 59 mm.

Bus cable requirements
- Maximum length of each of the 3 bus lines is 1200 meters
- Modules can be installed in all topologies - star, chain, tree topology
- Shielded bus cable is not required
- Minimum distance from power line cables is not required
- The end of each bus cable must be terminated with the included 100 Ohm resistor

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