Question:
Can I use the temperature value from the Modbus host in the SITRANS FS230 instead of an analog input or RTD?

Answer:
Yes, but this means the temperature value from the Modbus host is converted into the current (mA) value associated with the temperature span of the designated current input channel on the transmitter. The steps below describe how to configure and use channel 3 or 4 for this purpose (assuming the I/O module configuration includes the "input/output" functionality on at least one of these channels).

Steps to configure for I/O channels 3 or 4 for temperature via the Modbus host:

1. Modbus host writes the mA converted temperature to CH3 simulated current input value:
    a. Configure CH3 to be a current input for medium temperature, then span the input (e.g. 4mA = 0 °C, 20mA = 100 °C)
    b. Set register 10505 (PID_CH3_AI_SIMULATION_MODE) = 1 (Active)
    c. Disable alarm "215 channel 3 simulated" in menu 3.2.7.12 (…diagnostic events-> Enable alarms->Input/output events (1))
    d. Host writes to register 10506 (PID_CH3_AI_SIMULATED_INPUT) the simulated current value corresponding to the measured temperature (e.g. 12mA for 50 °C)

2. Modbus host writes the mA converted temperature to CH4 simulated current input value:
    a. Configure CH4 to be an current input for medium temperature, then span the input (e.g. 4mA = 0 °C, 20mA = 100 °C)
    b. Set register 10605 (PID_CH4_AI_SIMULATION_MODE) = 1 (Active)
    c. Disable alarm "216 channel 4 simulated" in menu 3.2.7.12 (…diagnostic events-> Enable alarms->Input/output events (1)).
    d. Host writes to register 10606 (PID_CH4_AI_SIMULATED_INPUT) the simulated current value corresponding to the measured temperature (e.g. 12mA for 50 °C)