

# DTP-L | DIGITAL TEMPERATURE PIPE SENSOR

## Modbus register map



## MODBUS REGISTER MAP

| INPUT REGISTERS |                          |               |  |                |                   |
|-----------------|--------------------------|---------------|--|----------------|-------------------|
|                 |                          | Data type     | Description  | Raw Data Range | Values            |
| 1               | Temperature reading      | signed int.   | Actual temperature level   | 0–850          | 500 = 50,0 °C     |
| 2–4             |                          |               | Reserved, return 0   |                |                   |
| 5               | Temperature sensor fault | unsigned int. | Flag that shows if the communication with the temperature sensor is lost | 0–1            | 0 = No<br>1 = Yes |
| 6–10            |                          |               | Reserved, return 0   |                |                   |

Note: The input registers can be read via the Modbus command: "Read input registers".

| HOLDING REGISTERS |   |               |  |                |  |                        |
|-------------------|---|---------------|--|----------------|--|------------------------|
|                   |   | Data type     | Description  | Raw Data Range | Values   | Factory Default Values |
| 1                 | Device slave address                      | unsigned int. | Modbus device address  | 1–247          |  | 1                      |
| 2                 | Modbus baud rate                          | unsigned int. | Modbus communication baud rate   | 0–6            | 0 = 4.800<br>1 = 9.600<br>2 = 19.200<br>3 = 38.400<br>4 = 57.600<br>5 = 115.200<br>6 = 230.400 | 2                      |
| 3                 | Modbus parity mode                        | unsigned int. | Parity check mode  | 0–2            | 0 = 8N1<br>1 = 8E1<br>2 = 8O1  | 1                      |
| 4                 | Device type                               | unsigned int. | Device type (Read only)  | DTP-L = 1115   |  |                        |
| 5                 | HW version                                | unsigned int. | Hardware version of the device (Read only)   | XXXX           | 0x0100 = HW version 1.00   |                        |
| 6                 | FW version                                | unsigned int. | Firmware version of the device (Read only)   | XXXX           | 0x0100 = FW version 1.00   |                        |
| 7–8               |   |               | Reserved, return"0"  |                |  |                        |
| 9                 | Modbus network resistor termination (NBT) | unsigned int. | Set device as ending the line or not by connecting NBT   | 0–1            | 0 = NBT disconnected<br>1 = NBT connected  | 0                      |
| 10                | Modbus registers reset                    | unsigned int. | Resets Modbus Holding registers to default values. When finished this register is automatically reset to '0' | 0–1            | 0 = Idle<br>1 = Reset Modbus registers   | 0                      |

**Note:** The holding registers can be managed via the following Modbus commands: "Read Holding Registers", "Write Single Register" or "Write Multiple Registers".

The free Sentera configuration and monitoring software 3SModbus can be downloaded via: <https://www.sentera.eu/eu/3SMCenter>