

GTEX1-60-DM | ELECTRONIC FAN SPEED CONTROLLER

Modbus register map



MODBUS REGISTER MAP

| INPUT REGISTERS | | | | | |
|-----------------|----------------------|------------------|--|----------------|--|
| | | Data type | Description | Raw data range | Values |
| 1 | Temperature input | unsigned integer | Analogue input value depending on selected analogue input type | 0–600 | 0 = 0,0 °C 600 = 60,0 °C |
| 2 | Vmax | unsigned integer | Max. motor speed value | 170–230 | 170 = 170 VAC 230 = 230 VAC |
| 3 | Vmin | unsigned integer | Min. motor speed value | 80–160 | 80 = 80 VAC 160 = 160 VAC |
| 4 | Output voltage | unsigned integer | Current output voltage | 0,80–230 | 0 = 0 VAC 80 = 80 VAC 230 = 230 VAC |
| 5 | Temperature setpoint | unsigned integer | Temperature setpoint value | GTE21-60-DM | 50–350 50 = 5,0 °C 350 = 35,0 °C |
| | | | | GTE-1-60-DM | 150–350 150 = 15,0 °C 350 = 35,0 °C |
| 6 | Proportional range | unsigned integer | Proportional temperature value | 1–4 | 1 = 2 °C 2 = 4 °C 3 = 6 °C 4 = 8 °C |
| 7 | Hysteresis | unsigned integer | Hysteresis value | 1–4 | 1 = 0,5 °C 2 = 1 °C 3 = 2 °C 4 = 3 °C |
| 8 | Off level | unsigned int. | Off level value | 0, 1 | 0 = OFF 1 = ON |
| 9 | Sensor status | unsigned int. | Analog input sensor status | 0, 1 | 0 = Connected 1 = Disconnected |
| 10 | Power Frequency | unsigned int. | Selected supply voltage frequency | 0, 1 | 0 = 50 Hz 1 = 60 Hz |

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 | Address | unsigned int. | Modbus device address | 1–247 | 1 | |
| 2 | Modbus baud rate | unsigned int. | Modbus communication baud rate | 1–4 | 2 | 1 = 9.600 2 = 19.200 3 = 38.400 4 = 57.600 |
| 3 | Modbus parity | unsigned int. | Parity check mode | 0–2 | 1 | 0 = 8N1 1 = 8E1 2 = 8O1 |
| 4 | Device type | unsigned int. | Device type (Read only) | GTE-1-60-DM=3003 GTE21-60-DM = 3013 | | |
| 5 | HW version | unsigned int. | Hardware version of the device (Read only) | 200 | | 0 x 200 = HW version 2.00 0 x 220 = SW version 2.20 |
| 6 | SW version | unsigned int. | Software version of the device (Read only) | 220 | | |
| 7 | Operating mode | unsigned int. | Mode of operations | 0–1 | 0 | 0 = Standalone mode 1 = Modbus mode |
| 8 | Output overwrite | unsigned int. | Output overwrite mode | 0–1 | 0 | 0 = Disabled 1 = Enabled |
| 9–10 | | | Reserved, return 0 | | | |
| 11 | Vmax | unsigned int. | Max. motor speed value. | 170–230 | 230 | 170 = 170 VAC 230 = 230 VAC |
| 12 | Vmin | unsigned int. | Min. motor speed value | 80–160 | 80 | 80 = 80 VAC 160 = 160 VAC |
| 13 | Temperature setpoint | unsigned int. | Temperature setpoint value | GTE21-60-DM | 150 | 50 = 5,0 °C 350 = 35,0 °C |
| | | | | GTE-1-60-DM | | 150–350 |
| 14 | Proportional range | unsigned int. | Proportional range value | 1–4 | 2 | 1 = 2 °C 2 = 4 °C 3 = 6 °C 4 = 8 °C |

| HOLDING REGISTERS | | | | | | |
|-------------------|-------------------------|---------------|---------------------------------|--|--------|--|
| | | Data type | Description | Raw data range | Values | Factory default values |
| 15 | Hysterisis | unsigned int. | Hysterisis value | 1–4 | 3 | 1 = 0,5 °C 2 = 1 °C 3 = 2 °C 4 = 3 °C |
| 16 | Off level | unsigned int. | Off level value | 0–1 | 0 | 0 = OFF 1 = ON |
| 17 | Modbus time-out control | unsigned int. | Modbus time-out control value | 0–1 | 0 | 0 = Disabled 1 = Enabled |
| 18 | Modbus time-out | unsigned int. | Modbus time-out value | 1 - 60 | 1 | 1 = 1 min 60 = 60 min |
| 19 | Vout | unsigned int. | Set override output voltage. | 0,80–230 Always settable. Active only if holding registers 8 is set to 1 | 0 | 0 = 0 VAC 80 = 80 VAC 230 = 230 VAC |
| 20 | Power Frequency | unsigned int. | Select supply voltage frequency | 0–1 | 0 | 0 = 50 Hz 1 = 60 Hz |

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/en/3smcenter>