

Merlin GM 100

Modbus Functionality



This document provides details on Modbus functionality of the Merlin GM100.

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*S1=CO

*S2=N02



Operation

Register/Address	Description	Notes	Read/Write
40000-40030	Reserved		
40031	Baud Rate	Type: uINT, Factor:1 9600 (Default), 19200, 38400, 57600 via dipswitch	R
40032	Address	Type: uINT, Factor:1, 0-127 via DIP Switch	R
40033	Model number	Type: uINT, Factor:1	R
40034	N/A	N/A	R
40035	*S1 Gas Concentration	Type: INT, Factor: 1, Unit: ppm	R
40036	*S2 Gas Concentration	Type: INT, Factor: 10, Unit: ppm	R
40037	Temperature	Type: INT, Factor: 10, Unit: °C/°F	R
40038	Humidity	Type: INT, Factor: 10, Unit: %RH	R
40039	Analog Output 1	Type: INT, Factor: 1, Unit: %	R
40040	Analog Output 2	Type: INT, Factor: 1, Unit: %	R
40041	*S1 Low Alarm Setpoint	Type: uINT, Factor: 1, Unit: ppm, Default: 25 (10 to 250)	R/W
40042	*S1 High Alarm Setpoint	Type: uINT, Factor: 1, Unit: ppm, Default: 100 (10 to 250)	R/W
40043	*S2 Low Alarm Setpoint	Type: uINT, Factor: 10, Unit: ppm, Default: 0.5 (0.5 to 10)	R/W

40044	*S2 High Alarm Setpoint	Type: uINT, Factor: 10, Unit: ppm, Default: 2.0 (0.5 to 10)	R/W
40045	High Alarm Delay	Type: uINT, Factor: 1, Unit: sec, Default: 2 (0-99)	R/W
40046	Zone Number	Type: uINT, Factor: 1, Default: 2 (0-10)	R/W
40047	Signal Relay Follows	Type: uINT, Factor: 1, Default: 2 (1=Low Alarm, 2=High Alarm)	R/W
40048	Temperature Offset	Type: INT, Factor: 1, Default: 0 (-9 to +9)	R/W
40049	Temperature High Alarm Setpoint	Type: INT, Factor: 10, Unit: °C/°F Default: 104°F / 40°C (77-104°F) (25-40°C)	R/W
40050	Temperature Low Alarm Setpoint	Type: INT, Factor: 10, Unit: °C/°F Default: 32°F / 0°C (32-59°F) (0-15°C)	R/W
40051	Service Warning	Type: uINT, Factor: 1, Unit: Months, Default: 0 (0=OFF, 6, 12, 18)	R/W
40052	Audible Alarm	Type: uINT, Factor: 1, Default: 1 (0=OFF, 1=ON)	R/W
40053	Signal Relay Polarity	Type: uINT, Factor: 1, Default: 1 (0=N/O, 1=N/C)	R/W
40054	Deadband	Type: uINT, Factor: 1, Default: 1 (0=OFF, 1=ON)	R/W
40055	Temperature High Alarm Enable	Type: uINT, Factor: 1, Default: 0 (0=OFF, 1=ON)	R/W
40056	Temperature Low Alarm Enable	Type: uINT, Factor: 1, Default: 0 (0=OFF, 1=ON)	R/W
40057	N/A	N/A	R
40058	Temperature Unit	Type: uINT, Factor: 1, Default: 2 (1=°C, 2 =°F)	R/W
40059	Reserved		
40060	Error Codes	1: No Error 2: EEPROM Error 3: Temperature Sensor Error 4: DAC Error 5: M1 Error 6: M2 Error 7: S1 Wrong Type 8: S1 Module Missing 9: S2 Wrong Type 10: S2 Module Missing	R
40061	Signal Relay Status	Type: INT, Factor: 1, (0=No alarm, 1=Alarm, relay changed status)	R
40062	Service Time Left	Type: INT, Factor: 1, Unit: Hours	R
40063	S1 Alarm Status	Type: INT, Factor: 1, (0=No alarm, 1=Low Alarm, 2=High Alarm)	R
40064	S2 Alarm Status	Type: INT, Factor: 1, (0=No alarm, 1=Low Alarm, 2=High Alarm)	R
40065	Temperature Alarm Status	Type: INT, Factor: 1, (0=No alarm, 1=Alarm)	R
40066	S1 Module Working Time left	Type: INT, Factor: 1, Unit: Days	R
40067	S2 Module Working Time left	Type: INT, Factor: 1, Unit: Days	R

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