

Modbus Functionality



This document provides details on Modbus functionality of the Merlin IAQ range.

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Operation

Register/Address	Description	Notes	Read/Write
40000-40019	Reserved		
40020	Baud Rate	Type: uINT, Factor:1 9600 (Default), 19200, 38400, 57600 via dipswitch	R
40021	Address	Type: uINT, Factor:1, 0-127 via DIP Switch	R
40022	Name	ASCI character	R
40023	Name	ASCI character	R
40024	NAME	ASCI Character	R
40025	CO2	Type: INT, Factor: 1, Unit: ppm	R
40026	Temperature	Type: INT, Factor: 10, Unit: °C/°F	R
40027	Humidity	Type: INT, Factor: 10, Unit: %RH	R
40028	PM2.5	Type: INT, Factor: 1, Unit: ug/m3	R
40029	TVOC	Type: INT, Factor: 1, Unit: ppb	R
40030	AQIndex	Type: INT, Factor: 1,	R
40031	PM1	Type: INT, Factor: 1, Unit: ug/m3	R
40032	PM10	Type: INT, Factor: 1, Unit: ug/m3	R
40033	1hr AVG AQindex	Type: INT, Factor: 1	R
40034	8hr AVG AQindex	Type: INT, Factor: 1	R
40035	CO2 Pre-Alarm	Type: uINT, Factor: 1, Unit: ppm Default: 600 (0 to 5000ppm)	R/W
40036	Co2 Alarm	Type: uINT, Factor: 1, Unit: ppm, Default: 1500 (0 to 5000ppm)	R/W
40037	CO2 Offset	Type: INT, Factor: 1, Unit: ppm, Default: 0 (-5000 to 5000)	R/W
40038	Temperature Min	Type: INT, Factor: 10, Unit: °C/°F, Default: 12.8 °C (-20 to 60°C)	R/W
40039	Temperature Max	Type: INT, Factor: 10, Unit: °C/°F Default: 30.0 °C (-20 to 60°C)	R/W
40040	Temperature Offset	Type: INT, Factor: 10, Unit: °C/°F Default: 0.0 °C	R/W
40041	Humidity Min	Type: uINT, Factor: 10, Default: 20.0 (0 to 100%)	R/W
40042	Humidity Max	Type: uINT, Factor: 10, Default: 70.0 (0 to 100%)	R/W
40043	Humidity Offset	Type: INT, Factor: 10, Default: 0.0	R/W
40044	PM1 Pre-Alarm	Type: uINT, Factor: 1, Default:16	R/W
40045	PM1 Alarm	Type: uINT, Factor: 1, Default:57	R/W
40046	PMP1 Offset	Type: INT, Factor: 1, Default:0	R/W
40047	PM2.5 Pre-Alarm	Type: uINT, Factor: 1, Default:21	R/W

40048	PM2.5 Alarm	Type: uINT, Factor: 1, Default:76	R/W
40049	PM2.5 Offset	Type: INT, Factor: 1, Default:0	R/W
40050	PM10 Pre-Alarm	Type: uINT, Factor: 1, Default:31	R/W
40051	PM10 Alarm	Type: uINT, Factor: 1, Default:114	R/W
40052	PM10 Offset	Type: INT, Factor: 1, Default:0	R/W
40053	TVOC Pre-Alarm	Type: uINT, Factor: 1, Default:250	R/W
40054	TVOC Alarm	Type: uINT, Factor: 1, Default:350	R/W
40055	TVOC Offset	Type: INT, Factor: 1, Default:0	R/W
40056	IAQ Fair Score	Type: uINT, Factor: 1, Default:80	R/W
40057	IAQ Poor Score	Type: uINT, Factor: 1, Default:40	R/W
40058	Temperature Unit (1=°C 2 =°F)	Type: INT, Factor: 1, Default:1	R/W
40059	Reserved		
40060	Error Codes	1: No Error 2: CO2 Sensor Error 3: Temperature Sensor Error 4: Humidity Sensor Error 5: EEPROM Error 6: Display Error 7: VOC Sensor Error 8: PM Sensor Error	R
40061	Score word displayed 1=Disabled 2=Enabled	Type: INT, Factor: 1, Default:1	R/W
40062	Audible Alarm 1=Disabled 2=Enabled	Type: INT, Factor: 1, Default:1	R/W
40063	CO2 Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40064	Temperature Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40065	Humidity Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40066	PM2.5 Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40067	TVOC Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40068	AQ Index Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40069	PM1 Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R
40070	PM10 Alarm Status	Type: INT, Factor: 1, 0: (No alarm) 1: (Alarm)	R

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