

## Modbus TCP Register List

### GreenManager for GreenMaster C-F

*Valid for firmware version 2.0 or later*

#### Overview

Modbus can access single addresses or multiple addresses simultaneously; either reading or writing single bit values or 16-bit values.

A Modbus address contains either a 1-bit discrete value or a 16-bit integer value.

#### Modbus data types

1-bit values or 16-bit values

Modbus Type	Description	Reference
Coil Status	Discrete Output (R/W)	0x
Input Status	Discrete Input (RO)	1x
Input Register	16-bit Register (RO)	3x
Holding Register	16-bit Register (R/W)	4x

#### Supported Modbus commands

The GreenManager Control Unit support these Modbus commands:

Function code	Description
01	Read Coil Status
02	Read Input Status
03	Read Holding Registers
04	Read Input Registers
05	Force Single Coil
06	Present Single Registers
08	Diagnostics
15	Force Multiple Colis
16	Preset Multiple Registers

Modbus	Designation	Min/Max	Note
000273	<b>Activation of Manual Operation for Output - F.GQ1 (EA Fan)</b> 0=Auto, 1=Manual	0-1	
000274	<b>Activation of Manual Operation for Output - AO 2 (Reserve)</b> 0=Auto, 1=Manual	0-1	
000275	<b>Activation of Manual Operation for Output - AO 3 (Reserve)</b> 0=Auto, 1=Manual	0-1	
000276	<b>Activation of Manual Operation for Output - AO 4 (Reserve)</b> 0=Auto, 1=Manual	0-1	
000277	<b>Activation of Manual Operation for Output - AO 5 (Reserve)</b> 0=Auto, 1=Manual	0-1	
000433	<b>Alarm Reset - Fire</b> Write 1 to this bit to reset Fire Alarm	0-1	
000435	<b>Reserve</b>		
000436	<b>Alarm Reset - Tripped Fuse</b> Write 1 to this bit to reset Fuse Alarm	0-1	
000439	<b>Alarm Reset - F.BP1/F.BF1 (EA) Regulator Deviation Alarm</b> Write 1 to this bit to reset EA Regulator Deviation Alarm	0-1	
000441	<b>Alarm Reset - F.GQ1 (EA) Fan Alarm</b> Write 1 to this bit to reset EA Fan Alarm	0-1	
000445	<b>Alarm Reset - F.BP2 (EA) Filter Alarm</b> Write 1 to this bit to reset EA Filter Alarm	0-1	
000446	<b>Alarm Reset - Smoke Detector Service Alarm</b> Write 1 to this bit to reset Smoke Detector Service Alarm	0-1	
002017	<b>Activation of Manual Operation for Digital Output - DO 1 (Reserve)</b> 0=Auto, 1=Manual	0-1	
002018	<b>Activation of Manual Operation for Digital Output - DO 2 (Reserve)</b> 0=Auto, 1=Manual	0-1	
002019	<b>Activation of Manual Operation for Digital Output - DO 3 Heat pump activation</b> 0=Auto, 1=Manual	0-1	
002020	<b>Activation of Manual Operation for Digital Output - DO 4 (Reserve)</b> 0=Auto, 1=Manual	0-1	
002021	<b>Activation of Manual Operation for Digital Output - DO 5 (Reserve)</b> 0=Auto, 1=Manual	0-1	
002022	<b>Activation of Manual Operation for Digital Output - DO 6 (Reserve)</b> 0=Auto, 1=Manual	0-1	
002023	<b>Activation of Manual Operation for Digital Output - F.QM2 (Damper)</b> 0=Auto, 1=Manual	0-1	
002033	<b>DO 1 Manual Override</b> Manual operation for DO 1 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	
002034	<b>DO 2 Manual Override</b> Manual operation for DO 2 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	

Modbus	Designation	Min/Max	Note
002035	<b>DO 3 - Activate Heat Pump Manual Override</b> Manual operation for DO 3 must be activated to be able to write to this parameter (0=OFF, 1=ON)		
002036	<b>DO 4 Manual Override</b> Manual operation for DO 4 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	
002037	<b>DO 5 Manual Override</b> Manual operation for DO 5 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	
002038	<b>DO 6 Manual Override</b> Manual operation for DO 6 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	
002039	<b>DO 7 F.QM2 - Fire Bypass Damper Manual Override</b> Manual operation for F.QM2 must be activated to be able to write to this parameter (0=OFF, 1=ON)	0-1	
006169	<b>Alarm Reset - Smoke Detector in SC2 address 21</b> Write 1 to this bit to reset Smoke Detector Alarm in SC2.21	0-1	
006170	<b>Alarm Reset - Smoke Detector in SC2 address 22</b> Write 1 to this bit to reset Smoke Detector Alarm in SC2.22	0-1	
006171	<b>Alarm Reset - Smoke Detector in SC2 address 23</b> Write 1 to this bit to reset Smoke Detector Alarm in SC2.23	0-1	
006172	<b>Alarm Reset - Smoke Detector in SC2 address 24</b> Write 1 to this bit to reset Smoke Detector Alarm in SC2.24	0-1	

**DISCRETE STATUS - 1-bit (RO)**

Modbus	Designation	Min/Max	Note
100033	<b>Stop/Start Status</b> 0 = Air Handling Unit Started 1 = Air Handling Unit Stopped	0-1	
100036	<b>Start via Time Channel</b> 0 = Time Channel Stop (Prohibit Run) 1 = Time Channel Run (Permit Run)	0-1	
100129	<b>Digital Output - DO 1 (Reserve)</b>	0-1	
100130	<b>Digital Output - DO 2 (Reserve)</b>	0-1	
100131	<b>Digital Output - DO 3 (F.GQ1 - Run Status/Activate Heat Pump)</b>	0-1	
100132	<b>Digital Output - DO 4 (Reserve)</b>	0-1	
100133	<b>Digital Output - DO 5 (Reserve)</b>	0-1	
100134	<b>Digital Output - DO 6 (Reserve)</b>	0-1	
100135	<b>Digital Output - DO 7 (F.QM2 - Fire Bypass Damper Output)</b>	0-1	
100145	<b>Digital Input Status - DI 1 (Reserve)</b>	0-1	
100146	<b>Digital Input Status - DI 2 (Fire)</b>	0-1	
100147	<b>Digital Input Status - DI 3 (Fuse)</b>	0-1	
100148	<b>Digital Input Status - DI 4 (Reserve)</b>	0-1	
100149	<b>Digital Input Status - DI 5 (Reserve)</b>	0-1	
100150	<b>Digital Input Status - DI 6 (F.GQ1 Fan Alarm)</b>	0-1	
100151	<b>Digital Input Status - DI 7 (F.QM2 Damper Closed)</b>	0-1	
100152	<b>Digital Input Status - DI 8 (F.QM2 Damper Open)</b>	0-1	
100153	<b>Digital Input Status - DI 9 (Reserve)</b>	0-1	
100178	<b>Alarm Status - Fire Alarm via Digital Input (DI2)</b>	0-1	
100242	<b>F.GQ1 (EA) Fan is running</b>	0-1	
100245	<b>Alarm Status - Fire Alarm via Analogue Smoke Detector (AI3)</b>	0-1	
100246	<b>Alarm Status - Fire Alarm via Analogue Smoke Detector (AI4)</b>	0-1	
100247	<b>Alarm Status - Fire Alarm via Analogue Smoke Detector (AI5)</b>	0-1	
100248	<b>Alarm Status - Fire Alarm via Analogue Smoke Detector (AI6)</b>	0-1	
100249	<b>Alarm Status - Analogue Smoke Detector Service Alarm (AI3)</b>	0-1	
100250	<b>Alarm Status - Analogue Smoke Detector Service Alarm (AI4)</b>	0-1	
100251	<b>Alarm Status - Analogue Smoke Detector Service Alarm (AI5)</b>	0-1	
100252	<b>Alarm Status - Analogue Smoke Detector Service Alarm (AI6)</b>	0-1	
100254	<b>Alarm Status - F.QM2 Bypass Damper Exercise Alarm</b>	0-1	
100255	<b>Copy of bit 100135 - DO 7 (F.QM2 - Fire Bypass Damper Out)</b>	0-1	
100256	<b>Alarm Status - Fire Alarm via F.BT1 and/or Digital Input</b>	0-1	
100287	<b>Alarm Status - B-Alarm (Priority B)</b>	0-1	
100288	<b>Alarm Status - A-Alarm (Priority A)</b>	0-1	
100401	<b>Alarm Status - Fire Alarm</b> This bit is set to 1 if the Fire Alarm is active, no matter what source it comes from	0-1	
100403	<b>Reserve</b>		
100404	<b>Alarm Status - Tripped Fuse</b>	0-1	
100407	<b>Alarm Status - F.BP1/F.BF1 (EA) Regulator Deviation Alarm</b>	0-1	
100409	<b>Alarm Status - F.GQ1 (EA) Fan Alarm</b>	0-1	
100413	<b>Alarm Status - F.BP2 (EA) Filter Alarm</b>	0-1	
100414	<b>Alarm Status - Smoke Detector Service Alarm</b>	0-1	
100415	<b>Alarm Status - Sum Alarm for all QM (Dampers)</b>	0-1	
106177	<b>SC2 address 21 - Communication Error</b>	0-1	
106178	<b>SC2 address 21 - Fire Alarm Active in SC2.21</b>	0-1	
106179	<b>SC2 address 21 - Reserve</b>		
106180	<b>SC2 address 21 - Damper 1 Alarm</b>	0-1	

Modbus	Designation	Min/Max	Note
106181	SC2 address 21 - Dampers Exercising	0-1	
106182	SC2 address 21 - Damper 2 Alarm	0-1	
106183	SC2 address 21 - Damper Sum Alarm (1, 2 or both)	0-1	
106184	Reserve		
106185	SC2 address 21 - Damper 1 Closed (Spring released/Fire) DI	0-1	
106186	SC2 address 21 - Damper 1 Open (Spring loaded/Normal op.) DI	0-1	
106187	SC2 address 21 - Damper 2 Closed (Spring released/Fire) DI	0-1	
106188	SC2 address 21 - Damper 2 Open (Spring loaded/Normal op.) DI	0-1	
106189	SC2 address 21 - Smoke Detector Normal Operation	0-1	
106190	SC2 address 21 - Smoke Detector Alarm	0-1	
106191	SC2 address 21 - Smoke Detector Service Alarm	0-1	
106192	SC2 address 21 - Smoke Detector Cable Break	0-1	
106193	SC2 address 22 - Communication Error	0-1	
106194	SC2 address 22 - Fire Alarm Active in SC2.22	0-1	
106195	SC2 address 22 - Reserve		
106196	SC2 address 22 - Damper 1 Alarm	0-1	
106197	SC2 address 22 - Dampers Exercising	0-1	
106198	SC2 address 22 - Damper 2 Alarm	0-1	
106199	SC2 address 22 - Damper Sum Alarm (1, 2 or both)	0-1	
106200	Reserve		
106201	SC2 address 22 - Damper 1 Closed (Spring released/Fire) DI	0-1	
106202	SC2 address 22 - Damper 1 Open (Spring loaded/Normal op.) DI	0-1	
106203	SC2 address 22 - Damper 2 Closed (Spring released/Fire) DI	0-1	
106204	SC2 address 22 - Damper 2 Open (Spring loaded/Normal op.) DI	0-1	
106205	SC2 address 22 - Smoke Detector Normal Operation	0-1	
106206	SC2 address 22 - Smoke Detector Alarm	0-1	
106207	SC2 address 22 - Smoke Detector Service Alarm	0-1	
106208	SC2 address 22 - Smoke Detector Cable Break	0-1	
106209	SC2 address 23 - Communication Error	0-1	
106210	SC2 address 23 - Fire Alarm Active in SC2.23	0-1	
106211	SC2 address 23 - Reserve		
106212	SC2 address 23 - Damper 1 Alarm	0-1	
106213	SC2 address 23 - Dampers Exercising	0-1	
106214	SC2 address 23 - Damper 2 Alarm	0-1	
106215	SC2 address 23 - Damper Sum Alarm (1, 2 or both)	0-1	
106216	Reserve		
106217	SC2 address 23 - Damper 1 Closed (Spring released/Fire) DI	0-1	
106218	SC2 address 23 - Damper 1 Open (Spring loaded/Normal op.) DI	0-1	
106219	SC2 address 23 - Damper 2 Closed (Spring released/Fire) DI	0-1	
106220	SC2 address 23 - Damper 2 Open (Spring loaded/Normal op.) DI	0-1	
106221	SC2 address 23 - Smoke Detector Normal Operation	0-1	
106222	SC2 address 23 - Smoke Detector Alarm	0-1	
106223	SC2 address 23 - Smoke Detector Service Alarm	0-1	
106224	SC2 address 23 - Smoke Detector Cable Break	0-1	
106225	SC2 address 24 - Communication Error	0-1	
106226	SC2 address 24 - Fire Alarm Active in SC2.24	0-1	
106227	SC2 address 24 - Reserve		
106228	SC2 address 24 - Damper 1 Alarm	0-1	
106229	SC2 address 24 - Dampers Exercising	0-1	
106230	SC2 address 24 - Damper 2 Alarm	0-1	
106231	SC2 address 24 - Damper Sum Alarm (1, 2 or both)	0-1	

Modbus	Designation	Min/Max	Note
106232	Reserve		
106233	SC2 address 24 - Damper 1 Closed (Spring released/Fire) DI	0-1	
106234	SC2 address 24 - Damper 1 Open (Spring loaded/Normal op.) DI	0-1	
106235	SC2 address 24 - Damper 2 Closed (Spring released/Fire) DI	0-1	
106236	SC2 address 24 - Damper 2 Open (Spring loaded/Normal op.) DI	0-1	
106237	SC2 address 24 - Smoke Detector Normal Operation	0-1	
106238	SC2 address 24 - Smoke Detector Alarm	0-1	
106239	SC2 address 24 - Smoke Detector Service Alarm	0-1	
106240	SC2 address 24 - Smoke Detector Cable Break	0-1	

**INPUT REGISTER - 16-bit integer value (RO)**

Modbus	Designation	Min/Max	Note
300008	BT1 via MODBUS - Outdoor Temperature via MODBUS	-40.0-99.0	°C
300032	Copy of Holding Parameter 432800 - Alarm Reset	0-1	
300035	F.BF1 (EA) - Differential Pressure	0-9999	Pa
300036	F.BF1 (EA) - Air Flow	0-9999	l/s
300039	F.BT1 - Extract Air Temperature	-55.0-125.0	°C
300040	BT1 - Outdoor Temperature	-55.0-125.0	°C
300042	F.BP1 - Extract Air Duct Pressure	0-9999	Pa
300045	F.BT2 - Exhaust Air Temperature	-55.0-125.0	°C
300047	F.BP2 - Extract Air Filter Pressure	0-9999	Pa
300051	F.GQ1 - EA Fan Output Value	0-4096	4096 = 100%
300069	Y03 external Temperature Fire Detector	-55.0-125.0	°C
300079	Zero parameter This value will always be 0	0	
300177	Copy of Holding Parameter 432945 - Year	2000-2099	
300178	Copy of Holding Parameter 432946 - Month	1-12	
300179	Copy of Holding Parameter 432947 - Date	0-31	
300180	Copy of Holding Parameter 432948 - Hour	0-23	
300181	Copy of Holding Parameter 432949 - Minute	0-59	
300182	Copy of Holding Parameter 432950 - Second	0-59	
300183	Copy of Holding Parameter 432951 - Weekday	1-7	
300184	Copy of Holding Parameter 432952 - Control Register	0-3	
300321	F.BP1 - Extract Air Pressure Current Setpoint	0-9999	Pa
300702	F.BP1/F.BF1 Setpoint Current Offset	0-9999	Pa (or l/s)
301153. 16H	Air Handling Unit Identity String containing 16 letters	ABCDEFGH...	String

**HOLDING REGISTER - 16-bit integer value (R/W)**

Modbus	Designation	Min/Max	Note
432772	<b>Unit Start/Stop</b> If the Air Handling unit is set to use Start/Stop via Modbus, this parameter can be used to start and stop the unit 0 = Air Handling Unit Stopped 1 = Air Handling Unit Running	0-1	
432776	<b>BT1 via MODBUS - Outdoor Temperature via MODBUS</b>	-40.0-99.0	°C
432800	<b>Alarm Reset</b> Write 1 to this parameter to reset all alarms in the unit	0-1	
432819	<b>F.GQ1 - EA Fan Output Value</b> Manual operation for F.GQ1 must be activated to be able to write to this parameter	0-4096	4096 = 100%
432945	<b>Year</b> Setting for the internal clock	2000-2099	
432946	<b>Month</b> Setting for the internal clock	1-12	
432947	<b>Date</b> Setting for the internal clock	0-31	
432948	<b>Hour</b> Setting for the internal clock	0-23	
432949	<b>Minute</b> Setting for the internal clock	0-59	
432950	<b>Second</b> Setting for the internal clock	0-59	
432951	<b>Weekday</b> Setting for the internal clock (1 = Monday, 7 = Sunday)	1-7	
432952	<b>Control Register</b> Write 1 to this register to stop the clock. Then you will be able to change the clock registers above. Write 3 to this register to start the clock again	0-3	
433099	<b>F.GQ1 Max Limitation Value</b>	0-4096	4096 = 100%
433163	<b>External Fire Dampers Exercise Start Time (Hour)</b>	0-23	h
433164	<b>External Fire Dampers Exercise Start Time (Minute)</b>	0-59	min
433165	<b>External Fire Dampers Exercise Interval</b>	0-20160	min
433287	<b>F.BP1 (EA) Duct Pressure Regulator - Alarm Delay</b>	0-7200	s
433289	<b>F.GQ1 (EA) - Fan Alarm Delay</b>	0-7200	s
433293	<b>F.BP2 - (EA) Filter Alarm Delay</b>	0-7200	s
433294	<b>Smoke Detector Service Alarm Delay</b>	0-7200	s
433334	<b>F.BT1 Fire Alarm Temperature</b>	38.0-45.0	°C
433338	<b>F.GQ1 Maximum Value During Fire</b>	0-4096	4096 = 100%
433365	<b>F.QM2 Exercise Interval</b>	0-20160	min
433366	<b>F.QM2 Exercise Time</b>	0-600	s
433367	<b>Y03 SIOX Fire Alarm Temperature</b>	38.0-45.0	°C
433384	<b>F.BP1 - (EA) Pressure Regulator - Setpoint (Setting)</b>	0-9999	Pa
433385	<b>F.BF1 - (EA) Air Flow Regulator - Setpoint (Setting)</b>	0-9999	l/s
433386	<b>F.BP1 - (EA) Pressure Regulator - P-Band</b>	0-9999	Pa
433387	<b>F.BF1 - (EA) Air Flow Regulator - P-Band</b>	0-9999	l/s
433388	<b>F.BP1 - (EA) Pressure Regulator - I-time</b>	0-3600	s
433389	<b>F.BF1 - (EA) Air Flow Regulator - I-time</b>	0-3600	s
433390	<b>F.BP1 - (EA) Pressure Regulator - Deviation Alarm Level</b>	0-9999	Pa
433392	<b>F.BP2 - Extract Air Filter - Alarm Level Dirty Filter</b>	0-9999	Pa



**HOLDING REGISTER - 16-bit integer value (R/W)**

Modbus	Designation	Min/Max	Note
433393	Time Channel Monday - Start Hour	0-24	h
433394	Time Channel Monday - Stop Hour	0-24	h
433395	Time Channel Tuesday - Start Hour	0-24	h
433396	Time Channel Tuesday - Stop Hour	0-24	h
433397	Time Channel Wednesday - Start Hour	0-24	h
433398	Time Channel Wednesday - Stop Hour	0-24	h
433399	Time Channel Thursday - Start Hour	0-24	h
433400	Time Channel Thursday - Stop Hour	0-24	h
433401	Time Channel Friday - Start Hour	0-24	h
433402	Time Channel Friday - Stop Hour	0-24	h
433403	Time Channel Saturday - Start Hour	0-24	h
433404	Time Channel Saturday - Stop Hour	0-24	h
433405	Time Channel Sunday - Start Hour	0-24	h
433406	Time Channel Sunday - Stop Hour	0-24	h
433473	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 1	-9999-9999	Pa (or l/s)
433474	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 2	-9999-9999	Pa (or l/s)
433475	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 3	-9999-9999	Pa (or l/s)
433476	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 4	-9999-9999	Pa (or l/s)
433477	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 5	-9999-9999	Pa (or l/s)
433478	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 6	-9999-9999	Pa (or l/s)
433479	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 7	-9999-9999	Pa (or l/s)
433480	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 8	-9999-9999	Pa (or l/s)
433481	F.BP1/F.BF1 (SA) Setpoint Offset Curve - Pressure/Flow 9	-9999-9999	Pa (or l/s)
433489	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 1	-40.0-99.0	°C
433490	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 2	-40.0-99.0	°C
433491	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 3	-40.0-99.0	°C
433492	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 4	-40.0-99.0	°C
433493	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 5	-40.0-99.0	°C
433494	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 6	-40.0-99.0	°C
433495	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 7	-40.0-99.0	°C
433496	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 8	-40.0-99.0	°C
433497	F.BP1/F.BF1 (EA) Setpoint Offset Curve - Temp 9	-40.0-99.0	°C
433505	Time Channel Monday - Start Minute	0-59	min
433506	Time Channel Monday - Stop Minute	0-59	min
433507	Time Channel Tuesday - Start Minute	0-59	min
433508	Time Channel Tuesday - Stop Minute	0-59	min
433509	Time Channel Wednesday - Start Minute	0-59	min
433510	Time Channel Wednesday - Stop Minute	0-59	min
433511	Time Channel Thursday - Start Minute	0-59	min
433512	Time Channel Thursday - Stop Minute	0-59	min
433513	Time Channel Friday - Start Minute	0-59	min
433514	Time Channel Friday - Stop Minute	0-59	min
433515	Time Channel Saturday - Start Minute	0-59	min
433516	Time Channel Saturday - Stop Minute	0-59	min
433517	Time Channel Sunday - Start Minute	0-59	min
433518	Time Channel Sunday - Stop Minute	0-59	min
433522	F.BF1 - (EA) Air Flow Regulator - Deviation Alarm Level	0-9999	l/s
433921. 16H	Air Handling Unit Identity String containing 16 letters	ABCDEFGH...	String