

SOFTWARE FAMILY:
PRIMEAW,
44

SOFTWARE RELEASE:
5.6

PARAMETERS DESCRIPTOR(E2):
4.6

Revision:
0.1 2017/02/22

GENERAL RULES:

CRC calculation: standard modbus RTU CRC

Baudrate 9600
Data Length 8
Parity none
Stop bit 1
Minimum TimeOut 60ms

ANALOG INPUT

Reading function code: 0x 03

The data received must be added to "Offset" and then multiplied by "Gain".
The result can have "Dec" decimal digit

Example:
sent ADDR+FUNCTION CODE + 01080001+CRC
received ADDR+030202B9+CRC
where $0x02B9 = 697(\text{dec})$ $(697 + 0) * 0.1 = 69.7\text{ }^{\circ}\text{C}$ Probe 1
sent ADDR+FUNCTION CODE + 01090001+CRC
received ADDR+03020222+CRC
where $0x0222 = 546(\text{dec})$ $(546 + 0) * 0.1 = 54.6\text{ }^{\circ}\text{C}$ Probe 2

HEX	HEX	HEX	HEX								
Name	Read Register	Num. Elements Read	Write Register	Num. Elements Write	Gain	Dec	Offset	Unit	Byte ORDER	Format	R / W
Probe 1	0108	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
Probe 2	0109	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
Probe 3	010A	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
Probe R	0100	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
Probe 1-I	0108	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
Probe 2-I	0109	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
Probe 3-I	010A	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
Probe R-I	0100	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
Probe 1-F	0108	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R
Probe 2-F	0109	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R
Probe 3-F	010A	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R
Probe R-F	0100	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R
SetPoint R	0600	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
SetPoint R-I	0600	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
SetPoint R-F	0600	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R
Probe 4	010B	0001	\	\	0,1	1	0	°C	H-L	16 bit Signed	R
Probe 4-I	010B	0001	\	\	0,1	0	0	°C	H-L	16 bit Signed	R
Probe 4-F	010B	0001	\	\	1	0	0	°F	H-L	16 bit Signed	R

SET POINT

Reading function code: 0x 03
Writing function code: 0x 10

The data received must be added to "Offset" and then multiplied by "Gain".
The result can have "Dec" decimal digit

Example:
sent ADDR+0303760001+CRC
received ADDR+030202A6+CRC
where $0x02A6 = 678(\text{dec})$ $(678 + 0) * 0.1 = 67.8\text{ }^{\circ}\text{C}$ SetPoint reading value
sent ADDR+1003760001+02+01E7+CRC
received ADDR+1003760001+CRC
where $0x01E7 = 487(\text{dec})$ $(487 + 0) * 0.1 = 48.7\text{ }^{\circ}\text{C}$ SetPoint written value

HEX	HEX	HEX	HEX								
Name	Read Register	Num. Elements Read	Write Register	Num. Elements Write	Gain	Dec	Offset	Unit	Byte ORDER	Format	R / W
SetPoint	0376	0001	0376	0001	0,1	1	0	°C	H-L	16 bit Signed	R/W
SetPoint-I	0376	0001	0376	0001	0,1	0	0	°C	H-L	16 bit Signed	R/W
SetPoint-F	0376	0001	0376	0001	1	0	0	°F	H-L	16 bit Signed	R/W

DIGITAL INPUT

Reading function code: 0x 01

Meaning single element

ON = 0x 0001
OFF= 0x 0000

HEX	HEX										
Name	Read Register	Num. Elements Read									R / W
Generic Digital Input	0207	0001									R
Generic Digital Input2	0224	0001									R

DIGITAL OUTPUT

Reading function code: 0x 01

