

PROTOCOL SERIAL FOR CAP10 V1.5

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PROTOCOL: RS232, 9600, 8, 1, N

CONTINUOUS STRING WILL BE TRANSMITTED AS BELOW:

AAAA,BBBB,CCC,WW,ZZ,UU,DDDDDDDDDDDDDDDDDDDD,SSSS,MM,NN

| | |
|----------------------|--|
| AAAA | Filtered output, Part per thousand |
| BBBB | Non-filtered output, Part per thousand |
| CCC | Electronics Temperature, deg C |
| WW | Filter weight w1 |
| ZZ | Filter weight w2 |
| UU | Filter bypass |
| DDDDDDDDDDDDDDDDDDDD | Diagnostic Code |
| SSSS | Serial number of sensor |
| MM | Error code |
| NN | Checksum |

Example for Calculation of Check sum

string = '0000,0000,024,30,05,02,09230006809050006616,00300,00,1C',0xD,0xA

Number of Data byte: 53 bytes

Example : 0000,0000,024,30,05,02,09230006809050006616,00300,00,

CRC8 : 2 byte

Ending : 2 byte **EX** : 0xD,0xA

CRC8 : checksum of 53 byte data 0000,0000,024,30,05,02,09230006809050006616,00300,00,

CRC8 cal:

$CRC8 = data1 + data2 + \dots + data51$

$CRC8 = CRC8 \bmod 255$

$CRC8L = CRC8 \& 0xF$

If $(CRC8L < 10)$ $CRC8L = CRC8L + '0'$ rang ['0'-'9']

Else $CRC8L = CRC8L + 65$ rang ['A'-'F']

$CRC8H = (CRC8 \& 0xF0) / 16$

If $(CRC8H < 10)$ $CRC8H = CRC8H + '0'$ rang ['0'-'9']

Else CRC8H = CRC8H + 65 rang ['A'-'F']

EX :

string = '0000,0000,024,30,05,02,09230006809050006616,00300,00,1C',0xD,0xA

CRC8='0'+ '0'+ ..+ '0'+ ', '=0x30+0x30+...+0x30+0x2C=0x0A1C

CRC8H='1', CRC8L='C'

EX:

string = '0567D2',0xD,0xA

Data = '0567'

CRC8='0'+ '5'+ '6'+ '7'=0x30+0x35+0x36+0x37=0xD2

CRC8H='D', CRC8L='2'

Support contacts

Manufacturer



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