

# 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**

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



**Daviteq Technologies Inc**

No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam.  
Tel: +84-28-6268.2523/4 (ext.122)

Email: [info@daviteq.com](mailto:info@daviteq.com) | [www.daviteq.com](http://www.daviteq.com)

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