

# Krohne Flowmeter

## Information Sheet for Crimson v2.0

### Compatible Devices

- IFC 020 D

### Verified Device

- IFC 020 D

### Accessible Data

Prefix	Description	Element Size	Access
C00	Reset Device	8 Bits	W
C05	Zero Flow Calibrate	8 Bits	W
C06	Reset Totalizers	8 Bits	W
C07	Write Totalizers	8 Bits	W
C08	Reset Errors	8 Bits	W
C17	Cached Pos. Totalizer *	Float	R/W
C27	Cached Neg. Totalizer *	Float	R/W
M00	Flow raw	Float	R
M01	Flow tau	Float	R
M02	Flow raw %	Float	R
M03	Flow tau %	Float	R
M04	Counter + (4 Bytes)	Float	R
M05	Counter - (4 Bytes)	Float	R
M06	Actual Status	8 Bits	R
S00	Module Errors	8 Bits	R
S01	Module Warnings	8 Bits	R
S10	EEPROM Errors	8 Bits	R
S11	Warning Levels	8 Bits	R
S12	Output Errors	8 Bits	R
S13	Indicator Status	8 Bits	R
S30	Display EEPROM Error	8 Bits	R
S31	Other Display Errors	8 Bits	R
S70	ADC EEPROM Error	8 Bits	R
S71	Other ADC Errors	8 Bits	R

S72	Parameter 7 Errors	8 Bits	R
S73	Other ADC Errors	8 Bits	R
S74	Maintenance Service	8 Bits	R
N00	WRITE PARAMETER BLOCK **	16 Bits	W
P00	Full Scale Format	8 Bits	R/W
P01	Full Scale	Float	R/W
P02	Time Constant	16 Bits	R/W
P03	Diameter	Float	R/W
P04	Main Constant	Float	R/W
P05	Nullpunct	Float	R
P06	Maintenance Bytes 0-4	32 Bits	R
P07	Maintenance Bytes 5-6	16 Bits	R
P10	Output Format Out 0	32 Bits	R/W
P11	Range Low Out 0	8 Bits	R/W
P12	Range High Out 0	8 Bits	R/W
P13	Imax Limit Out 0	8 Bits	R/W
P14	Error Value Out 0	8 Bits	R/W
P15	SMU on Out 0	8 Bits	R/W
P16	SMU off Out 0	8 Bits	R/W
P17	Output Format Out 1	32 Bits	R/W
P18	Range Low Out 1	8 Bits	R/W
P19	Range High Out 1	8 Bits	R/W
P1A	Imax Limit Out 1	8 Bits	R/W
P1B	Error Value Out 1	8 Bits	R/W
P1C	SMU on Out 1	8 Bits	R/W
P1D	SMU off Out 1	8 Bits	R/W
P20	Frequency Format	32 Bits	R/W
P21	Units Format	8 Bits	R/W
P22	Full Scale	Float	R/W
P23	Pulse Time	8 Bits	R/W
P24	Fmax	8 Bits	R/W
P25	SMU on	8 Bits	R/W
P26	SMU off	8 Bits	R/W
P30	Indicator Function	8 Bits	R/W
P31	On Limit	16 Bits	R/W
P32	Off Limit	16 Bits	R/W
P40	Totalizer Function	16 Bits	R/W
P41	SMU on	8 Bits	R/W
P42	SMU off	8 Bits	R/W
P43	+ Totalizer Format	16 Bits	R/W
P44	- Totalizer Format	16 Bits	R/W
P50	Display Function	16 Bits	R/W
P51	Flow Format	16 Bits	R/W

P52	Counters Format	16 Bits	R/W
P60	Location Bytes 1-4	32 Bits	R/W
P61	Location Bytes 5-8	32 Bits	R/W
P62	Location Bytes 9-10	16 Bits	R/W
P63	FSK Function	8 Bits	R/W
P64	FSK Channel Address	8 Bits	R/W
P70	Language	8 Bits	R/W
P71	Units Text Bytes 1-4	32 Bits	R/W
P72	Units Text Bytes 5-8	32 Bits	R/W
P73	Units Text Bytes 9-10	16 Bits	R/W
P74	Volume Conversion	Float	R/W
P75	Time Conversion	Float	R/W
P76	Password	16 Bits	R/W
P77	Device Type	16 Bits	R
P78	Maintenance Service	32 Bits	R
P79	Device Number	32 Bits	R
E00	LAST ERROR RESPONSE ***	16 Bits	R/W

**NOTES:**

\* C17 and C27 are the totalizer float values for executing command C07. These are 7 byte values in the flowmeter, so the least significant three bytes of the values are set to 0 when sent. Write the desired totalizer values, then set C07 to 1 to execute the write.

\*\* Write Parameter Block – Change the desired element(s) of the parameter block, and then set this item to the number of that block. E.g. write 10 to P25 which is SMU On in Parameter Block 2. Then set N00 to 2. All the values which have been read will be sent, with most recently written values replacing the read ones. Since the flowmeter takes some time to finish the write, the operator will likely see the new value, then the old value ( while the G3 continues to read ), then the new value.

\*\*\* Last Error Response – Display this as a 4 digit Hexadecimal Number. The first two digits will be the Function Byte Code that was sent, and the lower two digits will show the Status of request execution. For example, a common occurrence will be after a Parameter Block Write – a value such as 8401 will say Parameter block 4 was written (8=write, 4=block number), and the status was 01 (Request accepted, but not serviced within 350 ms).

**Cable Information**

<b>G3 RS485 Port</b>	<b>Krohne</b>
Tx- (1) / Rx- (4)	B
Tx+ (2) / Rx+ (3)	A