

FT2

FT4

- FT2: 2 isolated pulse flow or ratemeters
+ 2 current inputs
- FT4: 4 isolated pulse flow or ratemeters
+ 4 current inputs

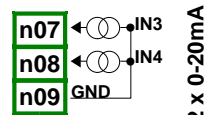
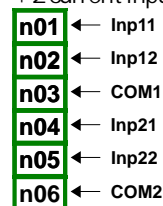
The FT modules have been especially designed for the MultiCon units used in flow or rate measurement applications. They allow user to display and record both actual flow (rate) and total flow (volume). These modules have extra 2 or 4 analogue inputs for general purpose use. Each pulse channel is equipped with counting inputs: Inp[n]1, Inp[n]2 and common ground COM[n]. All pulse channels are galvanically separated from the device and from themselves. The general purpose use current inputs have common ground and they are isolated from the supply voltage and other modules. FT2 and FT4 modules can be used also as high speed quadrature counters.

Pulse flow or ratemeters parameters are:

- Name - read-only input name given by the device,
- Unit - read-only field which displays the time base of the measurement,
- Base unit - defines unit which is used by the totalizer (for example when flow measurement unit is m³/s, the base unit is „m³“),
- Mode - defines the time base which is used during the measurement (pulses per second, pulses per minute, pulses per hour),
- Low limit - value which determines amount of pulses, below which in logical channel „Lo“ state will be displayed,
- High limit - value which determines amount of pulses, above which in logical channel „Hi“ state will be displayed,
- Counting mode - defines how the device should interpret signals on pulse inputs, it has the following options: with direction input, quad 1, quad 4,
- Filter - defines maximal frequency (with 50% duty cycle) the device will measure, options: disable, 10 Hz, 25 Hz, 50 Hz, 100 Hz, 1 kHz, 5 kHz, 10 kHz, 50 kHz,
- Zero time - maximal awaiting time for the next pulse. If this time is exceeded the device will display 0 value; it has the following options: 0.1 sec., 1 sec., 10 sec.,
- Balance - submenu which contains totalizer settings: Reset now, Reset mode; Reset source; Strobe mode; Strobe source; Counting direction; Direction source.

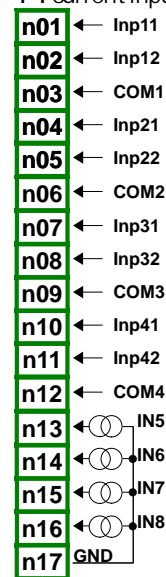
MODULE PIN ASSIGNMENT

FT2
2 pulse inputs
+ 2 current inputs



Pin description:
Inp[n]1, Inp[n]2: data inputs for tachometer [n],
COM[n]: COM for tachometer [n]

FT 4
4 pulse inputs
+ 4 current inputs



4 x 0-20mA

TECHNICAL DATA

	FT2	FT4
Number of inputs	2 x pulse flow or ratemeters (isolated) + 2 x current	4 x pulse flow or ratemeters (isolated) + 4 x current
Measurement range	flow / tacho input units: 1/sec, 1/min, 1/h current input: 0 ÷ 20 mA, 4 ÷ 20 mA	flow / tacho input units: 1/sec, 1/min, 1/h current input: 0 ÷ 20 mA, 4 ÷ 20 mA
Hardware limitation	current: 0 mA ÷ 24 mA	current: 0 mA ÷ 24 mA
Hardware resolution	current: 1 µA	current: 1 µA
Precision	0.1% @ 25°C	0.1% @ 25°C
Internal impedance	current: typ. 100	current: typ. 100
Max input frequency	flow / tacho: 50 kHz	flow / tacho: 50 kHz
Protection	current: 50 mA, auto-reset fuse	current: 50 mA, auto-reset fuse
Sampling period	50 ms *	50 ms *
Weight	42 g	50 g
Part number	M99-FT2-001	M99-FT4-001

* CMC reads result every 100ms