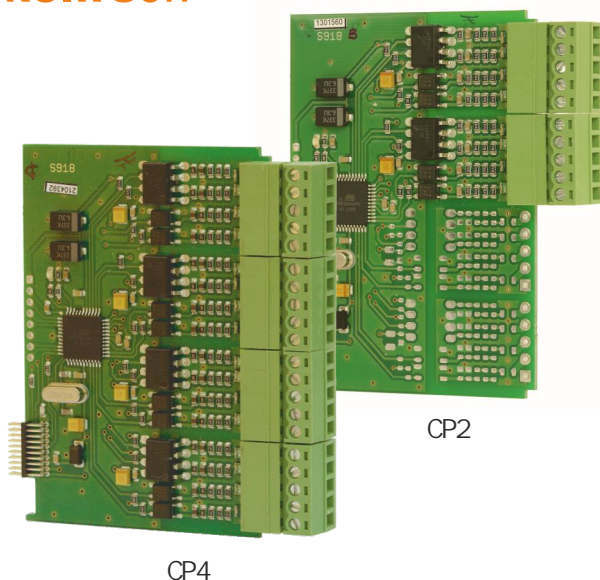


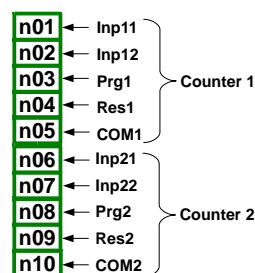
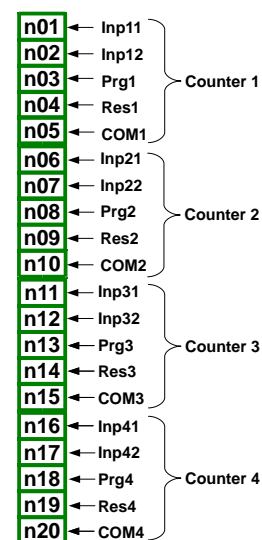
Input modules - universal counters

- CP2: 2 isolated universal counters
- CP4: 4 isolated universal counters

The MultiCon can be also equipped with modules having 2 or 4 universal counters. Each counter can be configured independently and has two counting inputs (Inp[n]1, Inp[n]2), programmable input (Prog[n]), reset input (Res[n]), where „n” means counter number from 1 to 4.



MODULE PIN ASSIGNMENT

CP2
2 universal countersCP4
4 universal counters

Pin description:

Inp[n]1, Inp[n]2: counting inputs, pulse
 Prg[n]: programmable inputs
 Res[n]: reset inputs
 COM[n]: common inputs
 [n] = counter number

The counter parameters are:

- Name - read-only input name given by the device,
- Unit - read-only field which displays measurement unit: pulses,
- Low Limit - value determining amount of pulses, below which in logical channel „Lo” state will be displayed,
- High Limit - value determining amount of pulses, above which in logical channel „Hi” state will be displayed,
- Function mode - specifies the counting mode: „A + B”, „A - B”, „quad”,
- Reset now - button allowing user to manually reset the counter,
- Reset mode - it allows to choose an additional resets for the counter, it has the following parameters: from log. channel or external,
- Reset source - this parameter is visible when Reset mode is set as from log. channel or both, it contains a list of logical channels and the chosen one will reset the counter when its value is higher than 0,
- Prog. inp. mode - specifies counter reaction on higher than 0 value appearance on Prog. input,
- Filter - sets filter on counter inputs which allows getting rid of negative effects of signal bounces; it has the following parameters: disable, 10 ÷ 90.

TECHNICAL DATA

	CP2	CP4
Number of inputs	2 counters (2 groups x 4 inputs, every group isolated from the other signals)	4 counters (4 groups x 4 inputs, every group isolated from the other signals)
CMC counting range	$-4.5^{15} \div 4^{15}$ pulses	$-4.5^{15} \div 4^{15}$ pulses
Module hardware limitation	$-2^{31} \div 2^{31}$ pulses	$-2^{31} \div 2^{31}$ pulses
Input signals voltage levels	Uin < 1V (logical LOW state) Uin > 10V (logical HIGH state)	Uin < 1V (logical LOW state) Uin > 10V (logical HIGH state)
Max input voltage	30V	30V
Input current (typically)	14 mA @ 24V; 6 mA @ 10V	14 mA @ 24V; 6 mA @ 10V
Insulation strength	2 kV	2 kV
Max input frequency	5 kHz* (for quad signals); 10 kHz (for other signals)	5 kHz* (for quad signals); 10 kHz (for other signals)
Protection	50 mA auto-reset fuse	50 mA auto-reset fuse
Weight	35 g	42 g
Part number	M99-CP2-001	M99-CP4-001

* CMC reads result every 100ms