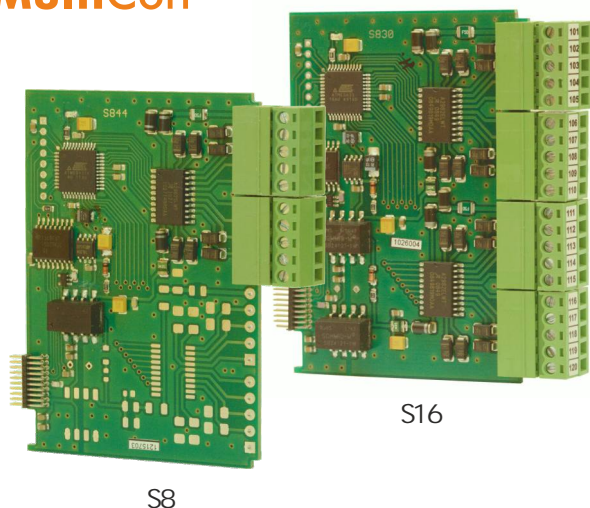


Output modules - SSR



- S8: 8 x SSR outputs
- S16: 16 x SSR outputs
- S24: 24 x SSR outputs

These modules are equipped with 8, 16 or 24 SSR outputs. May be used to control executive device state in a simple on/off or PWM mode.

MODULE PIN ASSIGNMENT

S8 8 SSR outputs	S16 16 SSR outputs	S24 24 SSR outputs
n01 $\pm 10..24V$ DC	n01 $\pm 10..24V$ DC	n01 $\pm 10..24V$ DC
n02 → OUT1	n02 → OUT1	n02 → OUT1
n03 → OUT2	n03 → OUT2	n03 → OUT2
n04 → OUT3	n04 → OUT3	n04 → OUT3
n05 → OUT4	n05 → OUT4	n05 → OUT4
n06 → OUT5	n06 → OUT5	n06 → OUT5
n07 → OUT6	n07 → OUT6	n07 → OUT6
n08 → OUT7	n08 → OUT7	n08 → OUT7
n09 → OUT8	n09 → OUT8	n09 → OUT8
n10 GND	n10 GND	n10 GND
	n11 $\pm 10..24V$ DC	n11 $\pm 10..24V$ DC
	n12 → OUT9	n12 → OUT9
	n13 → OUT10	n13 → OUT10
	n14 → OUT11	n14 → OUT11
	n15 → OUT12	n15 → OUT12
	n16 → OUT13	n16 → OUT13
	n17 → OUT14	n17 → OUT14
	n18 → OUT15	n18 → OUT15
	n19 → OUT16	n19 → OUT16
	n20 GND	n20 GND
		n21 $\pm 10..24V$ DC
		n22 → OUT9
		n23 → OUT10
		n24 → OUT11
		n25 → OUT12
		n26 → OUT13
		n27 → OUT14
		n28 → OUT15
		n29 → OUT16
		n30 GND

Pin description:

1, 11, 21 : supply inputs for outputs 1-8, 9-16 and 17-24 respectively (10-24V, max. 500 mA).
 10, 20, 30 : GND for outputs 1-8, 9-16 and 17-24 (internally connected)
 2-9, 12-19, 21, 29 : SSR driver outputs

Built-in outputs parameters in the PWM mode are:

- Name - read-only output name given by the device,
- Mode=PWM - this parameter allows the user to select method of the output operation,
- Source - this parameter contains a Logical channels list, where the selected logical channel will be a data source for this built-in output,
- Levels parameter block - these parameters allow the user to set the range of the input signal which will change the duty cycle of the output signal:
 - Lower level and Upper level - by setting these parameters the range is defined within which the change duty cycle of pulse depending on the source signal; below this range the signal is zero (zero width, zero duty cycle) and above this range the signal is completely filled (fully on of the cycle period),
 - Alarm level - when the data source for the built-in output returns the Error state or the range being exceeded: the low -Lo- state and high -Hi- state, the Alarm level parameter for the PWM mode allows setting the duty cycle of the output signal in time of an alarm state according to the parameters of Lower level and Upper level.
- Timing parameter block - these parameters allow the user to set the timing parameters of the output signal, discussed below in this chapter:
 - Period - the duration of one cycle of output pulse,
 - Minimum ON time - minimum duration of a high state,
 - Minimum OFF time - minimum duration of a low state.

TECHNICAL DATA

	S8	S16	S24
Number of outputs	8	16 (in 2 groups with separate supply)	24 (in 3 groups with separate supply)
Max. current source per output	powered internally: 10 mA, sum limited to 50 mA, powered externally: 100 mA, sum limited to 500 mA	powered internally: 10 mA, sum limited to 50 mA for a group, powered externally: 100 mA, sum limited to 500 mA for a group	powered internally: 10 mA, sum limited to 50 mA for a group, powered externally: 100 mA, sum limited to 500 mA for a group
Output method	relay modes or PWM mode *	relay modes or PWM mode *	relay modes or PWM mode *
Output High Level voltage	powered internally: 8V powered externally: (Vext. - 0.5V)	powered internally: 8V powered externally: (Vext. - 0.5V)	powered internally: 8V powered externally: (Vext. - 0.5V)
Overload protection	powered internally: internal fuse 50 mA, powered externally: internal fuse 500 mA	powered internally: internal fuse 50 mA (per group), powered externally: internal fuse 500 mA (per group)	powered internally: internal fuse 50 mA (per group), powered externally: internal fuse 500 mA (per group)
External output supply	30 V max.	30 V max.	30 V max.
Insulation strength	1 min @ 500V AC	1 min @ 500V AC	1 min @ 500V AC
Weight	32 g	42 g	69 g
Part number	M99-S8-001	M99-S16-001	M141-S24-001

* CMC updates output state every 100 ms