

SyCTRL Chassis & SyCTRL Safety Loop

SyCTRL Chassis

- 19 " rack mountable chassis
- Up to 6 front slots for Decision modules integration
- Up to 18 rear slots for slave modules integration
- Auto or self ventilated

SyCTRL Safety Loop

- Fast safety loop implementation
- Ethernet interface distribution to the Decision modules



Overview

The Chassis is the standard rack mountable 19" enclosure.

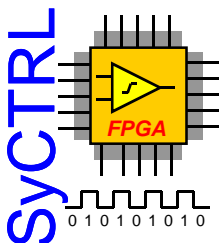
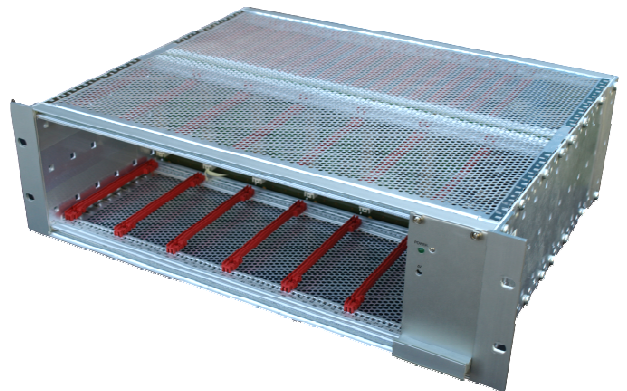
It is designed to accommodate up to 6 Decision high performance controllers on front side and up to 18 slave modules on rear side (max 3 per controller).

It is powered by a standard 24VDC secured power block on front side and are fitted with a rear side mounted Safety Loop management module which embeds the mains input connector, the safety loop reception / emission features and the Ethernet interface to a PC controller.

Safety management

The Safety Loop enables to daisy chain the various Decision modules (in the same chassis or in various chassis), in order to shut them down in case of error detection (internal error, protection triggering, ...). Each Decision module is able to be subscribed or not to the Safety Loop (strap setting).

Thanks to systematic EMC protection attributes, they guarantee robust EMC protection (emission / immunity).



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Electrical interface

Chassis (sc01x-0x)

AC input

Input voltage range	176 to 264 Vac
Input frequency	50 / 60 Hz
Max power consumption	240 W
Fuse protection	1.5A fast blow fuse

DC internal

Output voltage	24V
Maximum current	10A
Under voltage alarm	< 21,6V

Safety loop

sc030

Daisy chain voltage	24VDC
Propagation time intra chassis	better than 70 μ s
Propagation time inter chassis	better than 100 μ s
Communication interface	ETH 10/100Base-T

Chassis Cooling

sc01x-00

Thanks to top and bottom chassis drilled plates, a natural airflow is generated around the internal boards (see second picture on recto).

sc01x-01

This chassis embeds its own cooling system performed by integrated fans which force an airflow inside the chassis.

The air intake is located at the front / bottom of the chassis when the air exhaust is performed at the rear / top of the chassis (see first picture on recto).

Environmental

Operating environment

Temperature	10 to 40 $^{\circ}$ C
Humidity	40 to 90% noncondensing
Pressure	800 to 1050 mbar

Storage environment

Temperature	-10 $^{\circ}$ C to 60 $^{\circ}$ C
Humidity	up to 85% noncondensing
Pressure	800 to 1050 mbar

Mechanical

Size

sc01x-00 :	3 HU x 19" x 435mm (*)
sc01x-01 :	4 HU x 19" x 435mm (*)
sc030 :	3 HU x 12HP x 220mm (*)

Weight

sc010-00 :	4.5 kg
sc011-00 :	4.0 kg
sc010-01 :	6.5 kg
sc011-01 :	6.0 kg
sc030 :	375 g

Connector

sc01x :	none
sc030 :	1 x CE22 230V 1 x D-Sub 9 male 1 x D-Sub 9 female 1 x screw connector

Slot

sc010	front slots :	6
	rear slots :	18
sc011	front slots :	2
	rear slots :	6

(*) 1 HU = 44.45 mm, 1 HP = 5.08 mm

