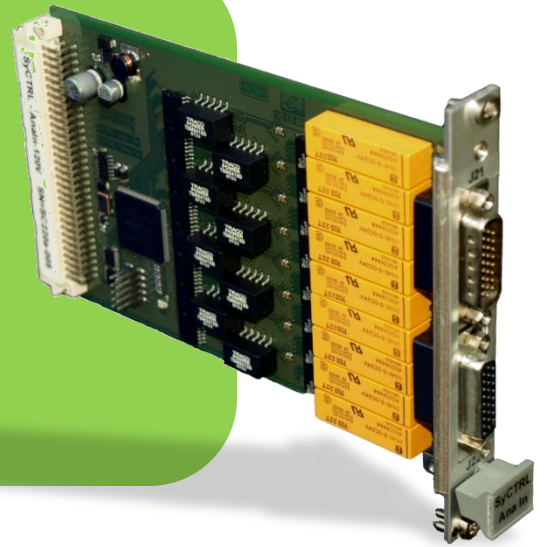


# SyCTRL Analog Input

## SyCTRL Analn board

- 8 isolated analog inputs
- Input range up to 130V
- Accuracy of 0.1% of full range
- Simultaneous sampling on the 8 channels
- Channel to channel isolation of 130 Vrms
- Physical separation from Product Under Test
- High impedance measurement lines (>1 M $\Omega$ )



## Overview

The Analn board is a 8-channel isolated analog input module designed for voltage acquisition.

The Analn board can be mounted in any rear slot of any style of Chassis.

It is managed by a standard Decision board and can be mixed with any SyCTRL rear mounted slave board (analog output, digital IO, LCL, RS485, HPC, ...) for design customization.

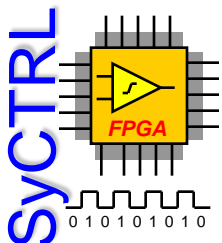
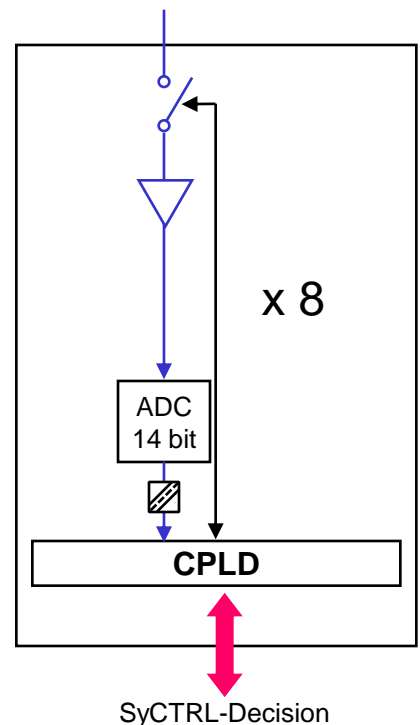
With 130 Vrms of channel-to-channel isolation, the Analn board protects not only the surrounding modules, Chassis and connected computer but also the other channels within the same Chassis.

## Downtime optimization

The Analn board embeds its own calibration parameters, minimizing its downtime to the board replacement in case of failure.

## Integrated Built-In self test

The Analn board embeds its own built-in self test which gives a clear status of the acquisition lines and of the relay health.



Clemessy Switzerland AG  
Gueterstrasse 86b  
CH-4053 BASEL  
Tel : +41 (0)61 205 31 50



# SyCTRL Analog Input

## Measurement characteristics

Number of channels	8
Input range	
sc220-00	± 130 V
sc220-01	± 50 V
sc220-02	± 10 V
ADC resolution	13 bits + 1 sign bit
Type of ADC	Serial
Scan rate	40 kS/s all channels
Simultaneous sampling	On all channels
Accuracy	0.05% FSR (*)
Channel-to-channel isolation	130 Vrms
Signal transfer	Differential DC coupled
Zero reference	Isolated per channel
Input impedance (differential)	> 1 MΩ
Input impedance (common)	> 5 MΩ
Capacitance	< 100 pF
Leakage current	< 50 nA
Fault voltage emission	± 15V
Fault voltage tolerance	
sc220-00	± 130 V
sc220-01	± 90 V
sc220-02	± 18 V
Filtering characteristics	Low pass $F_c < 2.5$ MHz

## Power characteristics

Power consumption	11 W
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## Physical separation

For each line	> 10 MΩ when open
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## Environmental

### Operating environment

Temperature	10 to 40 °C
Humidity	40 to 90% noncondensing
Pressure	800 to 1050 mbar

### Storage environment

Temperature	-10°C to 60 °C
Humidity	up to 90% noncondensing
Pressure	800 to 1050 mbar

## Mechanical

### Size

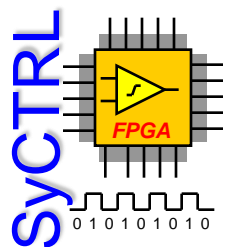
sc220	3HU x 4HP x 220mm (*)
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### Weight

sc220	260 g
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### Connector

sc220	1x D-Sub 26 male
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(\*) 1 HU = 44.45 mm, 1 HP = 5.08 mm, FSR: Full Scale Range

