



## Σ-Ahr CP Controller

Your (underground) systems are constantly subject to corrosion which can cause safety hazards and threaten your production. You can protect your systems making use of Cathodic Protection. The TSS Σ-Ahr CP Controller regulates voltage and current output required. It will protect your (underground) systems and keep your production going... Always.



### Reliable and effective protection

The most efficient corrosion control solution in the market today. Featuring accurate output current and voltage control, covering a wide control range. The system also includes options for continuous automatic control as well as for instantaneous manual control. You will be able to take control whenever you want to.

### Remote control strategy

Digital remote control is made possible with the combination of Nanodac and Modbus TCP-IP for full integration with solar energy system.

### Customized to your requirements

Design the Σ-Ahr CP Controller for your specific requirements. The number of power modules will be based on the power you require. This unique customization is made possible with the Nanodac.

### Space is money

The compact design of the Σ-Ahr CP Controller and the fact you don't need a separate DC/DC converter enables you to use smaller or even less enclosures. Simplifying design, reducing cost.

Creating a solid and highly efficient solar energy system to keep you going ...Always!



## Technical Specifications

Typical specifications		Σ-Ahr CP Controller
Nominal system voltage	[V]	24
Control voltage input	[V]	0-5
Energy efficiency at full load	[%]	96
Maximum efficiency	[%]	98
Output voltage	[V]	0-25 (Optional 50 V)
Output current (Based on max 11 power modules)	[A]	0 - 110A
Current regulation accuracy	[%]	1
Output overvoltage protection (continuous)	[V]	60
Output overvoltage protection (10/100ms)**	[A]	100
Output overvoltage protection (8/20μs)**	[kA]	2.8

\* 'n' is the number of power modules.

\*\* 10/100ms transient: caused by inductive load switching, 8/20μs transient: caused by lightning.

General specifications	
Dimensions (H x W x D)***	16.0 x 8.0 x 14.6 cm
Operating temperature	-10° C to +85° C
Storage temperature	-30° C to +85° C
Mounting	Indoor
Construction	3 / 7/ 11 power modules
Standards	IEC 61000-6-2 IEC 61000-6-4 IEC 60950-1

\*\*\* For a system including more than 3 power modules, the width will be extended with 8.0 cm for every 4 power modules added.

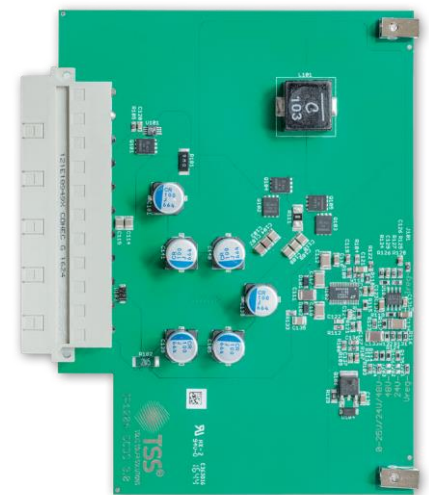
## Features

- The Σ-Ahr CP Controller is protected against reverse polarity on input.
- The integrated DC/DC converter features buck-boost conversion.
- Timer delay for providing on and off cycles.
- A Manual Control and Interface Unit, providing the following controller modes:
  - Constant current output mode.
  - Constant voltage output mode.
- Local and remote control via Nanodac and Modbus TCP-IP.

## Options

The following options can be added to the Σ-Ahr CP Controller:

- Reference cell control input for continuous automatic control.
- CP Controller fault alarm relay.
- Timer/synchroniser for multiple units on the same object.
- Measurements and CP controller regulation fully customizable.



Power module