

# INDUSTRIAL CONTROL DEVICES

## ETRANS – SC700 Datasheet

Precise Measurement,  
Ultimate Control

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# STANDARD CONTROLLERS

## MODEL Etrans- SC700



### Description

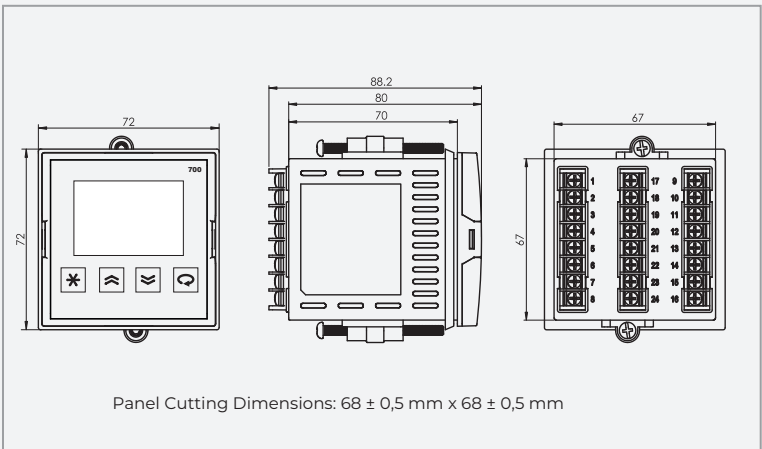
The SC700 is a modular industrial control device designed for measuring and controlling various process variables such as temperature, pressure, speed, level, humidity, current, voltage, and resistance. It features a 72 x 72 mm compact design and is suitable for both ON/OFF and PID control. Its modular structure allows each module to be configured independently, making it highly versatile for industries like food, plastics, iron-steel, chemistry, metallurgy, cement, ceramics, petro-chemistry, refineries, and glass.



### General Features

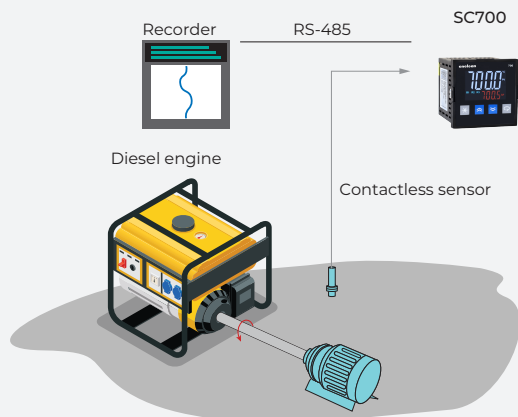
- Display: LCD screen with 2 rows of 4-digit numerical indicators and LED indicators for relays.
- Buttons: 4 capacitive touch keys.
- Control Types: ON/OFF, P, PI, PD, and PID control.
- Auto-Tuning: Automatic PID parameter adjustment.
- Sampling Time: 100 ms cycle.
- Communication: Standard MODBUS RTU protocol via RS485.

### Device Dimensions

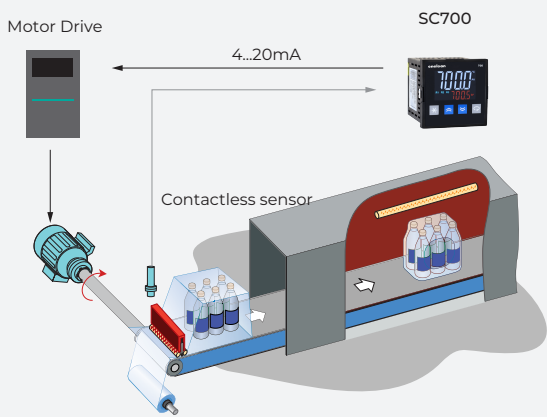


### Applications

Food, Plastic, Iron & Steel, Chemical, Metallurgy, Cement, Ceramic, Petrochemical, Refineries, Glass, and other industrial sectors.



Diesel engine speed control

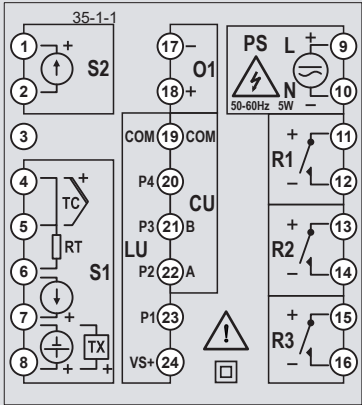


Controlling the speed of container movement on a conveyor during the packaging process

Technical Specifications

|                             |                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply Voltage (PS)         | 100-240 Vac/dc +10% -15%<br>24 Vac/dc +10% -20%                                                                                                               |
| Power Consumption           | 5W, 8VA.                                                                                                                                                      |
| Universal Sensor Input (S1) | Thermocouple: B, E, J, K, L, N, R, S, T, U<br>Two-wire transmitter: 4-20mA<br>Resistance thermometer: Pt-100<br>Current: 0/4-20mA<br>Voltage: 0-50mV, 0/2-10V |
| Transmitter Supply (TX)     | 24Vdc (Isc = 30mA)                                                                                                                                            |
| Analog Input Impedances     | Thermocouple, mV: 10MΩ<br>Current: 10Ω<br>Voltage: 1MΩ                                                                                                        |
| Analog Outputs (O1)         | Current: 0/4-20mA (RL ≥ 500Ω)<br>Voltage: 0/2-10V (RL ≥ 1MΩ)                                                                                                  |
| Relay Outputs (R1, R2, R3)  | Contact (R1, R2, R3): 250VAC 10A<br>Logic Output = 24Vdc 20mA                                                                                                 |
| Contact Life                | No-Load = 10,000,000 Switching Cycles<br>Under 250V 10A Resistive Load: 1,000,000 Switching Cycles                                                            |
| Other                       | Memory: 100 Years, 100,000 Refreshes<br>Accuracy: ± 0.2%<br>Sampling time: 100 ms<br>Operating temperature: -10...+55°C<br>Storage temperature: -20...+65°C   |
| Protection class:           | Front panel IP54 / Rear panel IP20                                                                                                                            |
| Mechanical Specifications   | Width: 72 mm<br>Height: 72 mm<br>Depth: 78.2 mm<br>Weight: 292 g                                                                                              |
| Panel Cut-out Dimensions    | 68 +/- 0.5 mm x 68 +/- 0.5 mm.                                                                                                                                |

Electrical Wiring Diagram



| Module   | Description                                                                                                                                               |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| S1       | Universal sensor input module<br>(The sensor used to measure the process value is connected to the terminals with the appropriate symbol on this module). |
| S2       | 0/4-20mA Auxiliary analog input module<br>(The function of this module can be selected via the device).                                                   |
| CU       | RS485 MODBUS RTU module.                                                                                                                                  |
| O1       | Analog output module<br>(The content of this module is determined by the product code, and its functions can be selected via the device).                 |
| R1,R2,R3 | Relay output modules (The content of this module is determined by the product code, and its function is selected via the device).                         |
| PS       | Supply voltage input (The supply voltage is determined by the product code).                                                                              |

# Contact us

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