# 5505

## SCADAPack
## RTD Input Module

## At a glance

- Input values scaled and linearized
- Data returned as 32-bit floating point number
- Low power consumption
- Automatic 3-wire RTD compensation
- 5503 emulation mode for legacy systems

The SCADAPack™ 5505 RTD input module is part of the SCADAPack family of I/O Expansion and Communication modules, providing flexible I/O and telemetry options.

With the addition of I/O Expansion modules, any[1] SCADAPack Smart RTU is easily expandable from its base I/O configuration to more than 700 process I/O points. Available for a wide range of process I/O requirements, from digital and analog I/O to I/O simulators and a UPS module, a maximum of twenty I/O modules may be connected for an expansion of up to 512 digital outputs, 512 digital inputs, 128 analog inputs, 64 counters and 64 analog outputs, on some models.

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# 5505
## SCADAPack
## RTD Input Module

## Specifications – 5505 RTD input module

### General

| | |
|---|---|
| Input Points | 4, RTD |
| RTD Type | 100 Ω platinum, 3 and 4-wire, auto-detection and compensation |
| Calibration | 0.00385 Ω / °C standard based on ASTM E 1137/E 1137M-04, ITS-90 |
| Ranges | 5505: Can be configured to return data in Ω, °C, °F or °K<br>• -200...800 °C (-328...1472 °F)<br>• 0 to 500 Ω<br>5503 Emulation: Dipswitch selectable<br>• 0...200 °C (32...392 °F)<br>• -100...100 °C (-148...212 °F)<br>• -200...0 °C (-328...32 °F)<br>• 0...800 °C (32...1472 °F)<br>• 0...400 °C (32...752 °F)<br>• 0 to 400 Ω |
| Data Format | • 5505: 32-bit floating point and 12 status bits<br>• 5503 Emulation: 16-bit signed integer |
| Resolution | • 5505: > 17-bit effective<br>• 5505 Emulation: 15-bit |
| RTD Status | • RTD is good (not open)<br>• RTD in range<br>• RTD 3 or 4-wire<br>• RTD status not available in 5503 Emulation |
| Accuracy on RTD Ranges | Percent of full scale over operational temperature range including linearization errors: +0.10%/-0.05% |
| Accuracy on 0...500 Ω | Percent of full scale over operational temperature range: ±0.03% |
| Excitation Current | 4 mA, 7.2% duty cycle in 4-wire mode, 14.4% in 3-wire mode, 250 ms scan interval |
| Line Resistance | 100 Ω max., in each line |
| Converter Type | 24-bit delta-sigma |
| Response Time | 380 ms typical for 10% to 90% signal change at minimum filter setting |
| Transient Protection | 2.5 kV surge-withstand capability as per ANSI/IEEE C37.90.1-1989 |
| Isolation | Isolation from logic supply and chassis, voltage 500 Vrms |
| 5 Vdc Power Requirements | 6 mA |
| 11 - 30 Vdc Power Requirements | 12 Vdc operation: 4 mA<br>• plus 0.6 mA per 4-wire RTD<br>• plus 1.2 mA per 3-wire RTD<br>24 Vdc operation: 2.2 mA<br>• plus 0.3 mA per 4-wire RTD<br>• plus 0.6 mA per 3-wire RTD |

# 5505

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## Specifications – 5505 RTD input module cont'd

### General

| | |
|---|---|
| 11...30 Vdc - Connector | Removable. Shared with RTD inputs 0-1 |
| 11...30 Vdc - Isolation | Isolation from logic supply and chassis |
| Terminations | 8 and 10-pole, removable terminal block,12...22 AWG, 15 A contacts |
| Dimensions | 74 mm wide x 124 mm high x 45 mm deep (2.90 in. x 4.90 in. x 1.80 in.) |
| Mounting | 7.5 x 35 DIN rail |
| Packaging | Corrosion-resistant; zinc-plated steel base and stainless steel cover with black enamel paint |
| Environment | 5% RH to 95% RH, non-condensing, -40...70 °C (-40...158 °F) operation, -40...85 °C (-40...185 °F) storage |
| Safety | • Non-Incendive Electrical Equipment for Use in Class I, Division2<br>• Groups A, B C and D Hazardous Locations<br>• ATEX II 3G and IECEx: Ex nA IIC T4 per EN 60079-15, protection type n (Zone 2)<br>• For the latest information regarding product environmental compliance visit the Schneider Electric Check a Product portal at https://checkaproduct.se.com/ |

## Model Code – 5505 RTD input module

| Part number | Model | Description |
|---|---|---|
| TBUX297318 | 5505 | RTD input module |

**Footnote: 1.** Some I/O Expansion modules are specific to SCADAPack 300 RTUs, others are specific to SCADAPack E RTUs.

**Note**: Accessories sold separately.

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*PEP: Product Environmental Profile (i.e. Environmental Product Declaration)