

High-Accuracy Fluid Immersion RTD Sensors

For Use in Monitoring Temperature in Fluid and Pressurized Applications



- ✓ Provided with High-Accuracy Class “A” 100 Ω Element (Standard)
- ✓ Stainless Steel Probe Stem and Mounting Fitting (1/8 NPT) Provided
- ✓ Usable Temperature Range: -200 to 750°C (Cable to 232°C)
- ✓ 3-Wire Construction for Connecting to Most Instruments

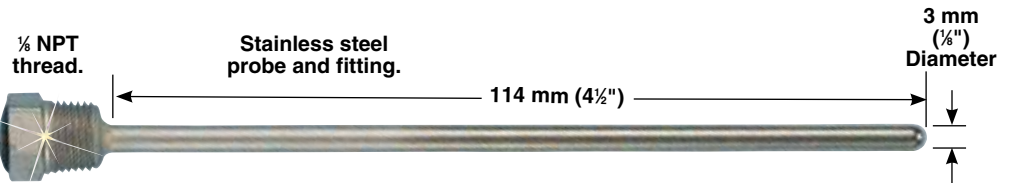


Shown with standard MTP-U-M connector (with mating connector). Other options available, see omega.com

1 m (40") long, #26 AWG stranded nickel-plated copper, PFA insulated, PFA jacketed cable.

Sensor and Handheld Thermometer Calibration Available

RTD-810 shown smaller than actual size.



To Order Visit omega.com/rtd-810 for Pricing and Details

Model Number	Sensing Element	Cable	Maximum Temperature
RTD-810	100 Ω Class “A” DIN	1 m (40") long PFA insulated	750°C (cable 232°C)
RTD-810-OTP	100 Ω Class “A” DIN	1 m (40") long PFA with OTP connector	750°C (cable 232°C)
RTD-810-TA3F	100 Ω Class “A” DIN	1 m (40") long PFA with TA3F connector	750°C (cable 232°C)

Terminations Available: Provided with standard miniature connector; for larger sized connector, add “-OTP” to model number f; for audio connector, add “-TA3F” to model number for an additional cost.

Ordering Example: RTD-810-OTP, Class “A” accuracy with heavy-duty connector. RTD-810-TA3F, Class “A” accuracy with audio connector.

Accessories

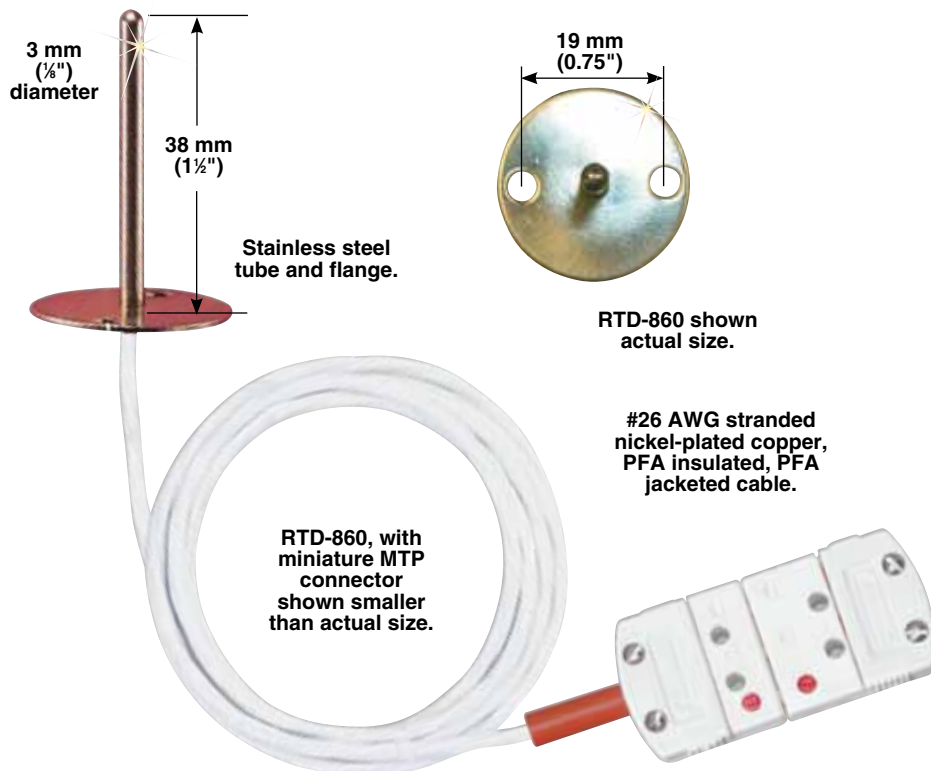
 <p>PUK-2T-10PK DIN rail terminal block, 10 pack, see omega.com/terminal-blocks</p>	 <p>DRF-RTD DIN rail mountable signal conditioner, see omega.com/drf-rtd</p>	 <p>HH804U, handheld, see omega.com/hh804_805</p>	 <p>TX86 transmitter with built-in indicator, see omega.com/tx86</p>
---	--	---	---

Precision RTD Probes for Laboratory Applications

For Measuring Temperature in Gas and Air Applications



- ✓ High-Accuracy 100 Ω Class “A” DIN Platinum Element Standard
- ✓ Includes Stainless Steel Flange and Sheath for Easy Installation
- ✓ 3-Wire Construction for Connecting to Most Instruments



Shown smaller than actual size with optional OM-DAQPRO-5300.

Supplied with miniature MTP style connector. Other connectors also available.

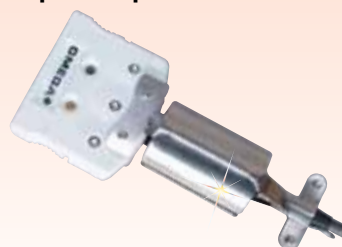
To Order

Model Number	Sensing Element	Cable	Maximum Temperature
RTD-860	100 Ω Class “A” DIN	1 m (40") long PFA insulated	230°C (450°F)
RTD-860-OTP	100 Ω Class “A” DIN	1 m (40") long PFA with OTP Connector	230°C (450°F)
RTD-860-SPRTXM1	100 Ω Class “A” DIN	1 m (40") long PFA SPRTX-MTH	230°C (450°F)

Terminations Available: Provided with standard miniature connector; for larger sized connector add “-OTP” to model number for an additional cost; for audio connector add “-TA3F” to model number for an additional cost.

Ordering Examples: RTD-860-OTP, Class “A” accuracy with standard sized connector, RTD-860-TA3F, Class A accuracy with audio connector.

Popular Options Include:



SPRTX 4 to 20 mA transmitter.



CNI3253 controller.



HE-XT105 PLC/HMI all-in-one.

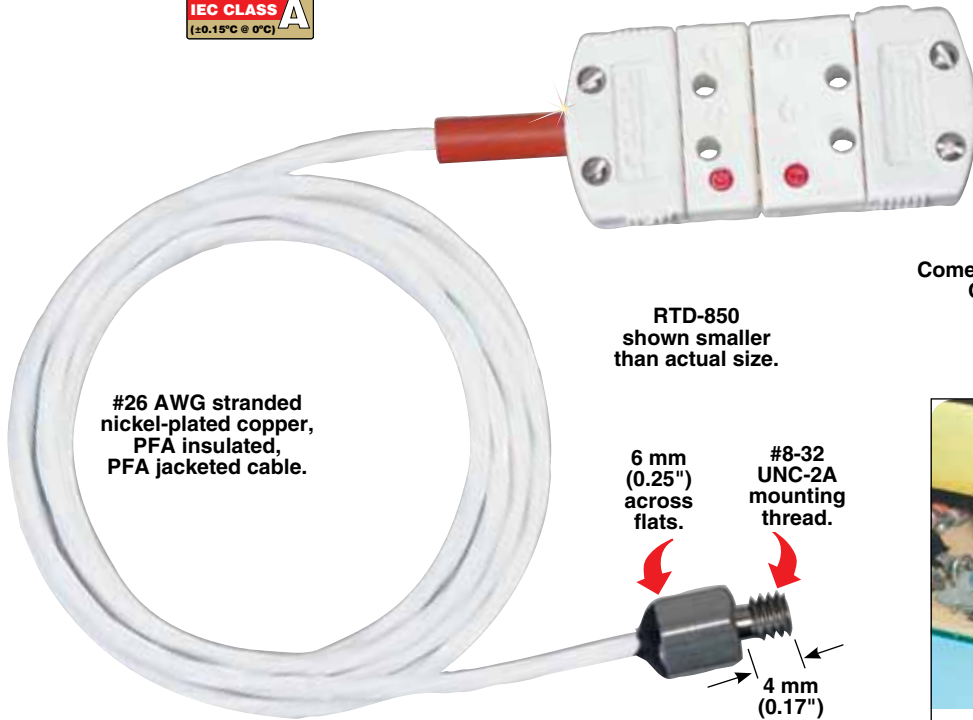


OM-SQ2010 data logger.

RTD Sensor with Miniature Housing Stud-Mount Construction For Use in Limited Spaces

✓ Stainless Steel Housing with #8-32 Thread Can be Installed in Tight Places

✓ High-Accuracy, 100 Ω, Class “A” DIN Platinum Element Standard
✓ 3-Wire Construction for Connecting to Most Instruments



#26 AWG stranded nickel-plated copper, PFA insulated, PFA jacketed cable.

RTD-850 shown smaller than actual size.

Comes standard with MTP connector. Other connectors available.



To Order			
Model Number	Sensing Element	Cable	Max Temperature
RTD-850-TA3F	100 Ω Class “A” DIN	1 m (40") Long PFA Insulated	230°C (450°F)
RTD-850-SPRTXM1	100 Ω Class “A” DIN	1 m (40") Long PFA Insulated	230°C (450°F)
RTD-850	100 Ω Class “A” DIN	1 m (40") Long PFA Insulated	230°C (450°F)

Terminations Available: Provided with a miniature connector standard. For heavy duty connector add “-OTP” to model number for an additional cost. For audio connector add “-TA3F” to model number for an additional cost.

Ordering Examples: RTD-850-OTP, 100 Ω Class “A” DIN with heavy-duty connector.

RTD-850-SPRTX(M1), 100 Ω Class “A” DIN with 4 to 20 mA transmitter.

Popular Options Include:



CN1A-TC temperature controller.



TXDIN1610 universal DIN rail transmitter.



OM-DAQPRO-5300 handheld data logger.



DRF-RTD DIN rail mountable signal conditioner.

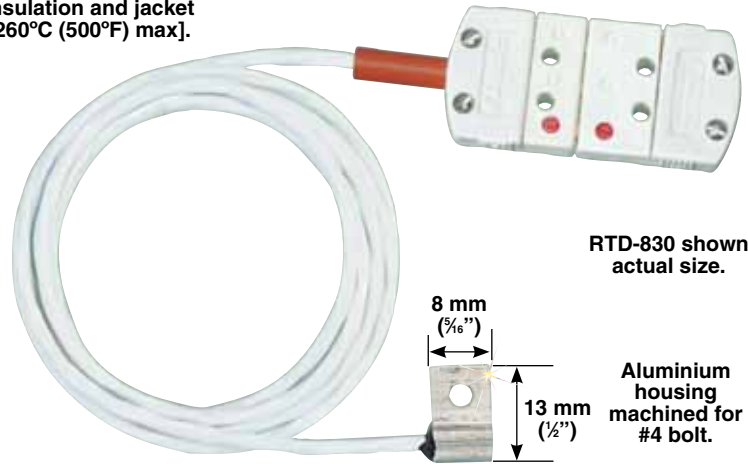
Surface Mount RTD Sensor



- ✓ Aluminium Housing for Fast Response Time
- ✓ Small Size Can be Installed on Most Flat Surfaces
- ✓ High-Accuracy, 100 Ω, Class "A" DIN Platinum Element
- ✓ 3-Wire Construction for Connecting to Most Handheld Instruments
- ✓ Custom Holes Available; Contact Our Custom Engineering Department

#26 AWG stranded copper wire with PFA insulation and jacket [260°C (500°F) max].

Miniature connector (MTP) style comes with mating connector.



RTD-830 shown actual size.

Aluminium housing machined for #4 bolt.

To Order

Model Number	Sensing Element	Cable	Max Temperature
RTD-830	100 Ω Class "A" DIN	1 m (40") PFA insulated	230°C (450°F)
RTD-830-TA3F	100 Ω Class "A" DIN	1 m (40") PFA insulated	230°C (450°F)

Terminations Available: Provided with a miniature connector standard, for heavy duty connector add "-OTP" to model number for an additional cost. For audio connector add "-TA3F" to model number for an additional cost.

Ordering Examples: RTD-830-SPRTX(M1), 100 Ω class "A" DIN with 4 to 20 mA transmitter.
RTD-830-TA3F, 100 Ω class "A" with audio connector.



Typical epoxy mounting; see OMEGABOND® cements and epoxies.

Typical bolt-mounted configuration could be used with OMEGATHERM® thermal paste.

Options



OT-201-1/2 high conductive paste.

OMEGABOND epoxies.

How are OMEGA's Model Numbers Constructed?

Termination Options: (Blank) = Miniature Connector (Standard)
OTP = Heavy-Duty Connector
TA3F = Audio Connector

LUG = Copper Lugs
SPRTX = Transmitter

Class "B" also available in economical 3-packs.

RTD — 830 — **OTP**

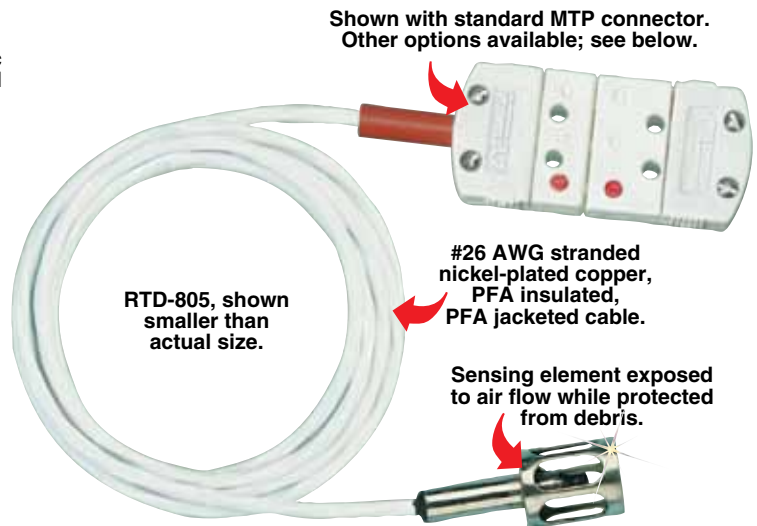
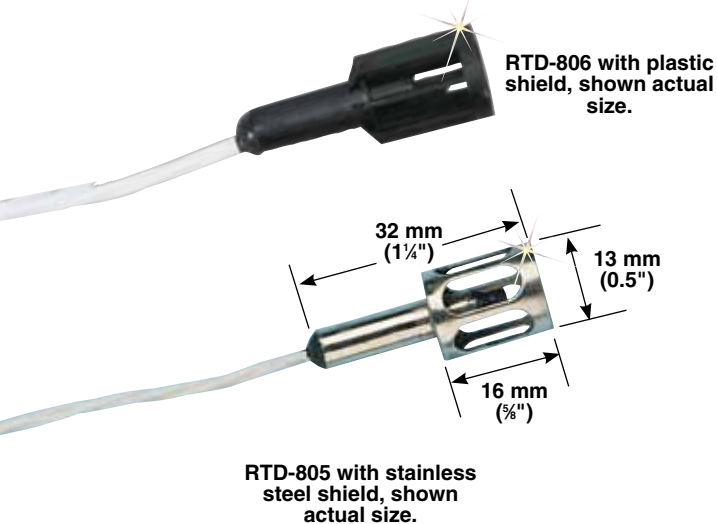
Ordering Example: RTD-830-OTP.

Air Temperature RTD Sensors



- ✓ For Monitoring of Air and Gas Streams; Mounts in Any Orientation
- ✓ Exposed Sensing Element Has Fast Response Times in Air

- ✓ Available with Stainless Steel or Plastic Housings
- ✓ High-Accuracy, 100 Ω, Class “A” DIN Platinum Element
- ✓ 3-Wire Construction for Connecting to Most Instruments
- ✓ Perfect for Air Temperature Monitoring and Control in Laboratories and Laminar Flow Benches



To Order			
Model Number	Sensing Element	Cable	Max Temperature
RTD-805	100 Ω Class “A” DIN	1 m (40”) PFA insulated	230°C (450°F)
RTD-806	100 Ω Class “A” DIN	1 m (40”) PFA insulated	230°C (450°F)

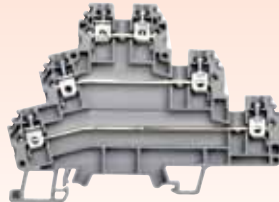
Terminations Available: Provided with a miniature connector standard. For heavy-duty connector add “-OTP” to model number for an additional cost. For audio connector add “-TA3F” to model number for an additional cost. For terminal lugs add “-LUG” to model number for an additional cost.

Ordering Examples: RTD-805-TA3F, 100 Ω class “A” SST housing with terminal lugs.

Popular Options Include:



IDRN-RTD digital signal conditioner, visit omega.com/idrn-idrx



PUK-2T-10PK DIN rail terminal block, 10 pack, see omega.com/terminal-blocks



CN606RTD3 6-zone 1/4 DIN temperature monitor.



OM-CP-OCTRTD 8-channel data logger, visit omega.com/om-cp-octrtd

How are OMEGA’s Model Numbers Constructed?

Termination Options: (Blank) = Miniature Connector (Standard)
 OTP = Heavy-Duty Connector
 TA3F = Audio Connector:
 LUG = Copper Lugs

Class “B” also available in economical 3-packs.

RTD — 805 — TA3F
 RTD — 806 — LUG

Ordering Example: RTD-805-TA3F. RTD-806-SPRTX(M1).

Encapsulated RTD Sensors

- ✓ Flat Disc Shape is Ideal for Surface Temperature Measurements
- ✓ Bonds to Surfaces for Measuring Heat Loss or Operating Temperatures

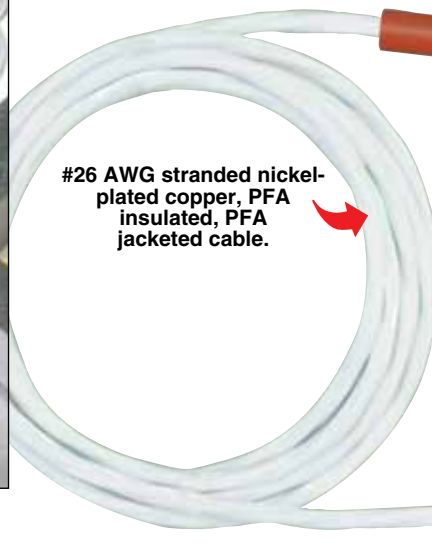
- ✓ High-Accuracy, 100 Ω, Class “A” DIN Platinum Element
- ✓ 3-Wire Construction for Connecting to Most Instruments

C



RTD-809 shown smaller than actual size.

RTD-809



#26 AWG stranded nickel-plated copper, PFA insulated, PFA jacketed cable.



RTD-809 shown actual size.

Shown with standard MTP style connector. Other connectors available; visit us online.

11 mm (7/16") diameter, 3 mm (1/8") thick sensor for surface mounting.

To Order

Model Number	Sensing Element	Cable	Max Temperature
RTD-809	100 Ω Class “A” DIN	1 m (40") PFA Insulated	230°C (450°F)

Terminations Available: Provided with a miniature connector standard. For heavy-duty connector add “-OTP” to model number, for additional cost to price. For audio connector add “-TA3F” to model number, for additional cost.

Ordering Example: RTD-809-TA3F, 100 Ω class “A” DIN with audio connector.

Popular Options Include:



DP25B-RTD process meter/controller.



TX86 transmitter with built-in indicator.



OM-DAQPRO-5300 handheld data logger.



OM-CP-QUADRTD 4-channel data logger.

How are OMEGA’s Model Numbers Constructed?

Termination Options: (Blank) = Miniature Connector (Standard)
 OTP = Heavy-Duty Connector LUG = Copper Lugs
 TA3F = Audio Connector SPRTX = Transmitter

Class “B” also available in economical 3-packs.

RTD — 809 — **OTP**