

# User's Manual

## Model 257875 RJ Sensor

Thank you for purchasing the 257875 RJ Sensor. Please read this manual thoroughly before use. After reading this manual, keep it in a safe place.

### Safety Precautions

Be sure to observe the following safety precautions when handling the sensor. YOKOGAWA assumes no liability for the customer's failure to comply with these requirements. Before you use the sensor, read the user's manual for the device that the sensor will be used with to completely familiarize yourself with the specifications and operations of the device.

#### CAUTION

##### Use the Sensor Only for Its Intended Purpose

This temperature sensor is used to perform reference junction compensation. Use the sensor only with devices that are designed for it. Do not use it for anything other than its intended purpose.

##### Check the Physical Appearance

Do not use the sensor if there is a problem with its physical appearance.

##### Do Not Disassemble or Modify

Do not disassemble or modify the sensor.

### French

#### ATTENTION

##### Utiliser le capteur aux seules fins prévues

Le capteur de température permet d'effectuer la compensation de jonction de référence. Utiliser le capteur avec les seuls appareils prévus à cet effet. Ne pas l'utiliser à d'autres fins que celles prévues.

##### Inspecter l'apparence physique

Ne pas utiliser le capteur si son intégrité physique semble être compromise.

##### Ne pas démonter, ni modifier

Ne pas démonter, ni modifier le capteur.

1st Edition: November 2014 (YMI)

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Printed in Japan

**YOKOGAWA** ◆

IM 257875-01EN  
1st Edition

### Waste Electrical and Electronic Equipment (WEEE), DIRECTIVE 2012/19/EU



(This directive is valid only in the EU.)

This product complies with the WEEE Directive (2012/19/EU) marking requirement. This marking indicates that you must not discard this electrical/electronic product in domestic household waste.

#### Product Category

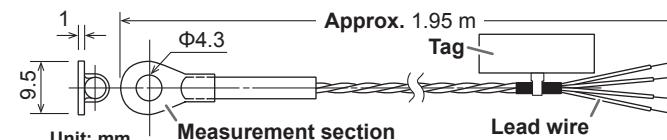
With reference to the equipment types in the WEEE directive Annex I, this product is classified as a "Monitoring and control instruments" product.

Do not dispose in domestic household waste. When disposing products in the EU, contact your local Yokogawa Europe B. V. office.

### 1. Overview

The 257875 RJ Sensor is a RTD (Pt100) temperature sensor used to perform reference junction compensation. This sensor can be used with devices that are designed for it.

### 2. Configuration and Part Names



The instrument number and date of production are written on the tag.

#### Standard Accessories

Manuals	IM 257875-01EN	User's Manual (this manual)
	PIM 113-01Z2	List of worldwide contacts

### 3. How to Use

Connect the sensor to a thermometer input terminal, a relay terminal block, or the like that you want to use as a reference junction. Use the sensor in a state in which the reference junction temperature or the temperature of the sensor itself is in equilibrium with the ambient temperature. For details, see the explanation of the device that this sensor is used with.

### 4. Specifications

Item	Specifications
Measurement range	-20°C to +60°C
Accuracy	Accuracy when used in combination with the 2553A by Yokogawa Meters & Instruments Corporation: ±0.3°C (typical)
Excitation current	Approx. 1 mA
Withstand voltage	Withstand voltage when the sensor is connected to the 2553A's external RJ sensor input terminal: 100 VAC for 1 minute between the sensor's measurement section and the 2553A case
Cord length	Approx. 1.95 m