

Specifications

Inputs

4 x thermocouple inputs (any of the following types), for use with miniature thermocouple connectors, and 2 x 3-wire Pt100 inputs, for use with 3-pole stereo TRS 3.5 mm connectors (see below):

Input Type Temperature Range Accuracy of RDXL6SD only (whichever is greater)

Type J	-200°C to 1200°C	± 0.1% or 0.8°C
Type K	-200°C to 1372°C	± 0.1% or 0.8°C
Type T	-200°C to 400°C	± 0.1% or 0.8°C
Type R	0°C to 1768°C	± 0.1% or 0.8°C
Type S	0°C to 1768°C	± 0.1% or 0.8°C
Type N	0°C to 1300°C	± 0.1% or 0.8°C
Type E	-200°C to 1000°C	± 0.1% or 0.8°C
Pt100 (3-wire)	-200°C to 850°C	± 1.0% or 1.0°C

General Specifications

Temperature Resolution 0.1° for temperatures below 1000° (C or F)
1° for temperatures above 1000° (C or F)
Display 2.83" (72 mm) resistive touch TFT, 320 x 240 pixels, backlight
Configurable Parameters Temperature units, alarms, signal processing, date and time, data logging, power options, graph channels

Temperature Units

12 x alarms (2 per channel) with adjustable level, individually configurable as Hi or LO.
Average, minimum, maximum, standard deviation, 2-channel temperature difference

Signal Processing

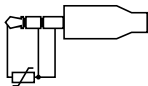
Alarm Configuration

Power Supply

Operating Temperature 0 to 50°C
2 x 1.5 V NiMH rechargeable AA batteries > 2000 mAh (not supplied), or 2 x 1.5 V alkaline AA batteries > 2000 mAh (not supplied), or 5 V DC 250 mA adapter (included)
Current Draw 250 mA while logging with full display brightness
60 mA (typical) in power saving mode
180 g without batteries
Weight Use stereo (3-pole) 3.5 mm connectors, wired as follows:
Pt100 Connectors 60 V DC or 24 V rms to earth ground
Maximum Input Voltage 60 V DC or 24 V rms to earth ground

Data Logging Specifications

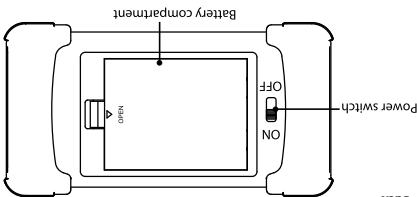
Data Logging Interval 1 to 86,400 seconds (1 day)
Max. SD Card Capacity 32 GB SD or SDHC (4 GB SD Card included)
Variables Logged Measured temperature, cold junction temperature, alarm events
File Format .csv (can be imported to Excel)
Configurable Parameters Sample period, number of samples, scheduled start date and time



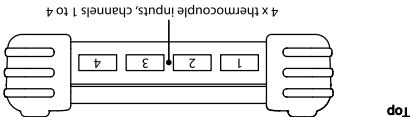
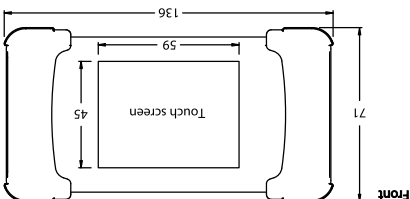
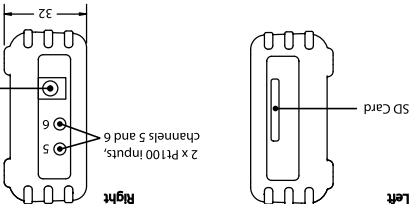
Refer to this instruction sheet when the warning symbol (⚠) is encountered.
To avoid the possibility of electric shock or personal injury:
• Before using the thermometer inspect the case. Do not use the thermometer if it appears damaged.
• Look for cracks or missing plastic;
• Do not apply more than 60 V DC or 24 V rms between any input terminal and earth ground;
• To prevent damage, do not apply more than 1 V between any two input terminals;
• Replace the battery as soon as the battery low indicator appears;
• Only use the battery types specified in this instruction sheet;
• Do not use the instrument around explosive gas, vapour or dust.



Warning



Back



Dimensions (mm)

RDXL6SD

Model Numbers

RDXL6SD	6-channel handheld temperature data logger with 4 GB SD Card and 5 V DC mains adapter
Accessory	
RDXL6-LVMA	Spare 5 V DC mains adapter

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• Italy • Mexico/Latin America • Netherlands/Benelux
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WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **25 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **two (2) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/ DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence. The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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MADE IN UNITED KINGDOM



RDXL6SD
6-Channel Temperature
Data Logger
With Touch Screen

RDXL6SD Touch Screen

- Power adapter connected
- Battery low indicator
- SD Card inserted
- Scheduled logging enabled
- Alarm logging enabled



Channel View



Select °C or °F

Detailed View



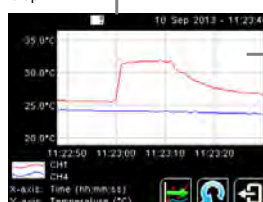
Start/Stop Logging

Reset All Alarms

Reset Channel Alarms

Reset Values

Graph



Drag left and right to scroll graph

Exit to previous screen

Return to present time
Clear graph

Settings



Channel Settings



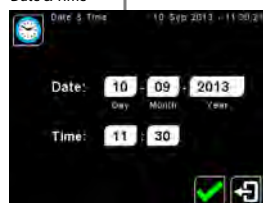
Graph Options



Power Options

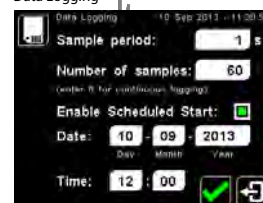


Date & Time

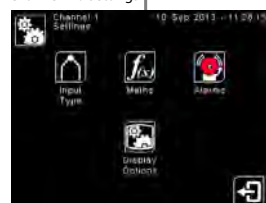


Save changes
Exit without saving

Data Logging



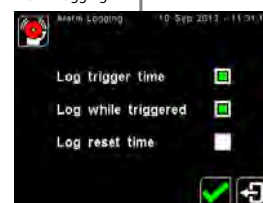
Channel 1-6 Settings



Graph Data 1 & 2



Alarm Logging



Input Type



Maths

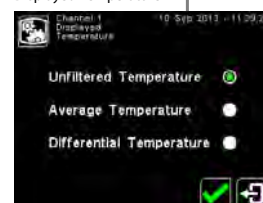


Alarms



Reset Channel Alarms

Displayed Temperature



Alarm 1 & 2

