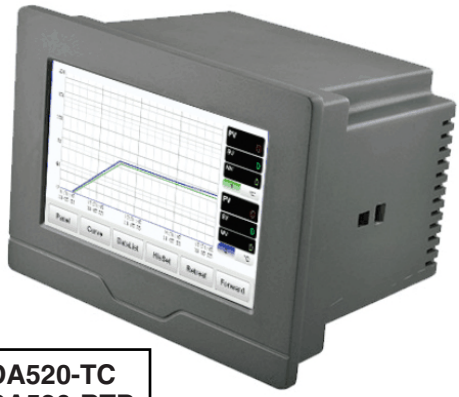
RDA Series

The RDA Paperless Recorder Series is a value priced large format touch screen datalogger that integrates measurement, display, alarm, and datalogging into one slim instrument. The RDA Series is available in both 5" and 7" display models. The instrument is easy to install and requires no external HMI. Depending on the model, the RDA Series can support 2, 4 or up to 6 input channels with either thermocouple or RTD input type with 0.2% FS measuring accuracy. Each channel can have independent input specification, with square-root, multiplication, addition and subtraction. All channels are equipped with digital adjustment and filtering functions.
The RDA Series provides a real time trend records via trend graph or bar graph. History and alarm records can be reviewed in the logger itself with 150MB of internal storage or exported to external USB storage device. The RDA-740 and RDA-760 models have a slim installation depth of 40mm of for use where installation space is limited.



RDA520-TC
RDA520-RTD

RDA740-TC **RDA760-TC**
RDA740-RTD **RDA760-RTD**

Features

- **Color TFT Touch Screen Display: 5" or 7"**
- **2 Isolated Inputs for Thermocouple or RTD models**
- **2 Internal Alarm setpoints per channel**
- **Maximum sample rate of 1 Hz**
- **Exportable data via USB Drive**
- **Low power consumption (≤5W)**

Omega model	RDA-520-RTD	RDA-520-TC	RDA-740- RTD	RDA-740- TC	RDA-760- RTD	RDA-760- TC
Dimensions						
Diagonal Display Size	5 inches (127mm)		7 inches (177.8mm)			
External Size	5.71 x 4.13 x 3.94 inches (145 x 105 x 100mm) (Width*Height*Depth)		7.99 x 6.10 x 1.57 inches (203 x 155 x 40mm) (Width*Height*Depth)			
Installation Opening Size	5.71 x 4.13 x 3.94 inches (145 x 105 x 100mm) (Width*Height*Depth)		7.56 x 5.47 inches (192 x 139mm) (Width*Height)			
Display						
Color	TFT True Color					
Resolution	800*480					
Backlit	Long-life LED					
Input Method	Screen Touching					
Touch Screen	Four-wire Resistive					

Omega model	RDA-520-RTD	RDA-520-TC	RDA-740- RTD	RDA-740- TC	RDA-760- RTD	RDA-760- TC
Memory						
Storage	150MB					
Recording Interval (seconds)	1, 2 3, 4, etc. User Defined					
Instrument Input						
Input Type	Two 2-wire RTD Pt100, Cu50, 0-80ohm, 0-400ohm, etc (Two inputs share one common port)	Two thermo-couples K, S, R, E, J, T, B, N, WRe5-WRe26	Four 2-wire RTD Pt100, Cu50, 0-80ohm, 0-400ohm, etc (Every two inputs share one common	Four thermo-couples K, S, R, E, J, T, B, N, WRe5-WRe26	Six 2-wire RTD Pt100, Cu50, 0-80ohm, 0-400ohm, etc (Every Two inputs share one common	Six thermo-couples K, S, R, E, J, T, B, N, WRe5-WRe26
Measurement Accuracy	0.2%FS 1 digit / 0.3%FS 1 digit (only for Cu50)	0.2% FS 1 digit. Internal cold junction compensation (CJC) will require an additional 1°C CJC error to be taken into consideration. The stated accuracy for type B thermocouple is only guaranteed between 600~1800°C (+1112 ~ +3272°F).	0.2%FS 1 digit / 0.3%FS 1 digit (only for Cu50)	0.2% FS 1 digit. Internal cold junction compensation (CJC) will require an additional 1°C CJC error to be taken into consideration. The stated accuracy for type B thermo-couple is only guaranteed between 600~1800°C (+1112 ~ +3272°F).	0.2%FS 1 digit / 0.3%FS 1 digit (only for Cu50)	0.2% FS 1 digit. Internal cold junction com-pensation (CJC) will require an additional 1°C CJC error to be taken into consideration. The stated accuracy for type B thermo-couple is only guaranteed between 600~1800°C (+1112 ~ +3272°F).
Response Time	≤1.5 seconds (digital filter parameter dL is set as 0 or 1)					
Temperature Drift	≤0.01%FS/°C (Typical 50ppm/°C)					

Omega model	RDA-520-RTD	RDA-520-TC	RDA-740- RTD	RDA-740- TC	RDA-760- RTD	RDA-760- TC
Measuring Range	Pt100: -200 ~ +800°C (-328~ +1472°F) , Cu50: -50~ +150°C (-58 ~ +302°F)	K -50 ~ +1300°C (-58 ~ +2372°F), S -50 ~ +1700°C (-58 ~ 3092°F) , R -50 ~ +1700°C (-58 ~ 3092°F, T -200 ~ + 350°C (-328 ~ +662°F), E 0 ~ +800°C (+32 ~ 1472°F) , J 0 ~ +1000°C (+32 ~ 1832 F), B +200 ~ +1800°C (+392 ~ 3272 F), N 0~ +1300°C (+32 ~ 2372°F), WRe3~WRe5 0 ~ +2300°C (+32 ~ +4172°F), WRe5~WRe26 0~+2300°C (+32 ~ +4172°F)	Pt100: -200 ~ +800°C (-328~ +1472 F) , Cu50: -50~ +150°C (-58 ~ +302 F)	K -50 ~ +1300°C (-58 ~ +2372°F), S -50 ~ +1700°C (-58 ~ 3092°F) , R -50 ~ +1700°C (-58 ~ 3092°F, T -200 ~ + 350°C (-328 ~ +662°F), E 0 ~ +800°C (+32 ~ 1472°F) , J 0 ~ +1000°C (+32 ~ 1832°F), B +200 ~ +1800°C (+392 ~ 3272°F), N 0~ +1300°C (+32 ~ 2372°F), WRe3~WRe5 0 ~ +2300°C (+32 ~ +4172°F), WRe5~WRe26 0~+2300°C (+32 ~ +4172°F)	Pt100: -200 ~ +800°C (-328 ~ +1472°F) , Cu50: -50~ +150°C (-58 ~ +302°F)	K -50 ~ +1300°C (-58 ~ +2372°F), S -50 ~ +1700°C (-58 ~ 3092°F) , R -50 ~ +1700°C (-58 ~ 3092°F, T -200 ~ + 350°C (-328 ~ +662°F), E 0 ~ +800°C (+32 ~ 1472°F) , J 0 ~ +1000°C (+32 ~ 1832°F), B +200 ~ +1800°C (+392 ~ 3272°F), N 0~ +1300°C (+32 ~ 2372°F), WRe3~WRe5 0 ~ +2300°C (+32 ~ +4172°F), WRe5~WRe26 0~+2300°C (+32 ~ +4172°F)

General Specification

Electromagnetic Compatibility (EMC)	4KV/5KHz according to IEC61000-4-4 (Electrical Fast Transient); 4KV according to IEC61000-4-5 (Electrical Surge).	
Isolation Withstanding voltage	Among power, relay contact or signal terminals 2300VDC. Among isolated electroweak terminals 600V	
Power Supply	100~240VAC, -15%, +10% / 50~60Hz	
Power Consumption	≤5W	
Operating Environment	Temperature -10~+60°C (+14 ~ +140 F) Humidity 90%RH	
Storage Temperature	-20 ~ +80°C (-4 ~ +176 F)	
Unit Weight	1.21 lbs (0.55kg)	1.54 lbs (0.7kg)
Cooling Method	Natural Air Cooling	