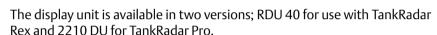
## Remote Display Unit RDU 40 & 2210 DU

## **BENEFITS**

- Remote read-out
- 100 m (328 ft) distance from gauge
- Easy to install
- Easy to use
- Robust, weather / dirt protection
- · Excellent readability
- Provides temperature inputs for TankRadar Pro



Its robust design makes it withstand many years of outdoor use under harsh environmental conditions. The display functions are software controlled and interacts with the connected TankRadar gauge.

It is easy to work with via the 4-key display keyboard.

The functionality can be customized to meet the specific requirements from the users of TankRadar Pro and TankRadar Rex.

## **RDU 40 for TankRadar Rex**

The RDU 40 is remotely mounted, connected by a 3-wire cable. Up to two units can be connected to one TankRadar Rex gauge.

It can display calculated data, such as level, average temperature, volume, signal strength, etc.

The operator can set up a user-defined window where the most useful information is presented. This window will be shown as the default view.

The RDU 40 can view up to six spot temp elements connected to TankRadar Rex.

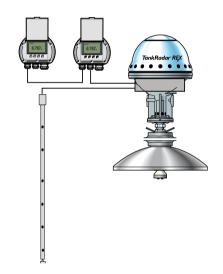
## 2210 DU for TankRadar Pro

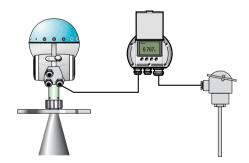
The 2210 DU can be remotely mounted, connected by a 4-wire cable, or factory mounted at the TankRadar Pro's enclosure. If remotely mounted, up to six PT100 elements can be connected to the optional temperature measurement card in the 2210 DU.

The TankRadar Pro is fully configurable from the 2210 DU. User-friendly menues and an installation wizard will guide through the complete start-up procedure.

All measured and calculated values such as level, spot temperature, volume, signal strength etc are displayed as numeric values or shown as bargraphs. A user-defined window can be set up by the operator.











	Specification Remote Display Unit	
View/Software:	RDU 40 (for TankRadar Rex)	2210 DU (for TankRadar Pro)
Available data	Level, ullage, volume, level rate, signal strength, average temperature	Level, ullage, volume, level rate, signal strength, spot temperature
Configuration of RTG from display	No	Yes
Display: single view	Easy readable with character size 25 mm (1 inch)	Easy readable with character size 25 mm (1 inch)
Display: standard view	Maximum 7 text lines, 16 characters/line can be displayed in each screen view	Maximum 7 text lines, 16 characters/line can be displayed in each screen view
Display: user-defined view	The customer can set up a view where the most useful information is scrolled.	The customer can set up a view where the most useful information is scrolled.
Electrical:	RDU 40 (for TankRadar Rex)	2210 DU (for TankRadar Pro)
Display type	Graphic LCD display 128 x 64 pixels	Graphic LCD display 128 x 64 pixels
Ambient temperature	-20 to 55° C (-4 to 130° F)	-20 to 55° C (-4 to 130° F)
Ex class	ATEX: II 2 (I) G, EEx ib IIC T4 IECEx: Ex ib IIC T4 FM: Intrinsically safe, Class 1, Div 1, Group A, B, C, D	ATEX: II 2 (I) G, EEx ib [ia] IIC T4 IECEx: Ex ib IIC T4 FM: Intrinsically safe, Class 1, Div 1, Group A, B, C, D
Max cable length	100 m (328 ft) (total length if two units are connected to the same gauge	100 m (328 ft)
Cable requirement	3-wire, shielded instrument cable, min 0.5 mm² (AWG 20), max 2.5 mm² (AWG 14) Max Ø 14 mm (0.55 inch) Min insulation thickness for each wire 0.25 mm (0.00985 inch)	4-wire, shielded instrument cable, Min 0.5 mm <sup>2</sup> (AWG 20), Max 2.5 mm <sup>2</sup> (AWG 14) Max Ø 14 mm (0.55 inch) Min insulation thickness for each wire 0.25 mm (0.00985 inch)
Temperature option:	RDU 40 (for TankRadar Rex)	2210 DU (for TankRadar Pro)
Measuring range	Not applicable! Temperature elements are connected	-50 to 250° C (-58 to 480° F)
	directly to TankRadar Rex. See separate specification.	
Number of elements	directly to TankRadar Rex. See separate specification.	3 x 3 wire PT100 spot or 6 x PT100 spot with commun return
Number of elements  Ex class	directly to TankRadar Rex. See separate specification.	
	directly to TankRadar Rex. See separate specification.	6 x PT100 spot with commun return
Ex class	directly to TankRadar Rex. See separate specification.	6 x PT100 spot with commun return Ex ia IIC T4
Ex class Ambient temperature	directly to TankRadar Rex. See separate specification.	6 x PT100 spot with commun return Ex ia IIC T4 -40 to 70° C (-40 to 158° F
Ex class Ambient temperature Accuracy	directly to TankRadar Rex. See separate specification.	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C
Ex class Ambient temperature Accuracy Resolution	RDU 40 (for TankRadar Rex.)	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14)  Max Ø 18 mm (0.7 inch)  Min insulation thickness for each wire
Ex class  Ambient temperature  Accuracy  Resolution  Cable requirement		6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14)  Max Ø 18 mm (0.7 inch)  Min insulation thickness for each wire  0.25 mm (0.00985 inch)
Ex class Ambient temperature Accuracy Resolution Cable requirement Mechanical:	RDU 40 (for TankRadar Rex)	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14)  Max Ø 18 mm (0.7 inch)  Min insulation thickness for each wire 0.25 mm (0.00985 inch)  2210 DU (for TankRadar Pro)
Ex class Ambient temperature Accuracy Resolution Cable requirement  Mechanical: Material housing	RDU 40 (for TankRadar Rex) Die-cast aluminium	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14) Max Ø 18 mm (0.7 inch) Min insulation thickness for each wire 0.25 mm (0.00985 inch)  2210 DU (for TankRadar Pro)  Die-cast aluminium
Ex class  Ambient temperature  Accuracy  Resolution  Cable requirement  Mechanical:  Material housing  Dimensions	RDU 40 (for TankRadar Rex) Die-cast aluminium 150 x 120 x 70 mm (6 x 4 x 3 inch)	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14)  Max Ø 18 mm (0.7 inch)  Min insulation thickness for each wire 0.25 mm (0.00985 inch)  2210 DU (for TankRadar Pro)  Die-cast aluminium  150 x 120 x 70 mm (6 x 4 x 3 inch)
Ex class Ambient temperature Accuracy Resolution Cable requirement  Mechanical: Material housing Dimensions Weight	RDU 40 (for TankRadar Rex) Die-cast aluminium 150 x 120 x 70 mm (6 x 4 x 3 inch) 1.2 kg (2.6 lb) 2 x M20, 1 x M25 Optional: ½ inch NPT and ¾ inch NPT	6 x PT100 spot with commun return  Ex ia IIC T4  -40 to 70° C (-40 to 158° F  ± 0.5° C  0.1° C  Shielded instrument cable, Min 0.5 mm² (AWG 20), Max 2.5 mm² (AWG 14)  Max Ø 18 mm (0.7 inch)  Min insulation thickness for each wire 0.25 mm (0.00985 inch)  2210 DU (for TankRadar Pro)  Die-cast aluminium  150 x 120 x 70 mm (6 x 4 x 3 inch)  1.2 kg (2.6 lb)  2 x M20, 1 x M25  Optional: ½ inch NPT and ¾ inch NPT



**Emerson Process Management** 

Rosemount Tank Gauging
Box 130 45, SE-402 51 Göteborg, SWEDEN
T: +46 31 3370 000 F: +46 31 25 30 22
E-mail: sales.srt@emersonprocess.com
www.rosemount-tg.com

