

Gönnheimer
Elektronik GmbH

Scale-terminal

WT158

suitable for mounting in hazardous area
TÜV 01 ATEX 1742



- ☞ Scalable weight indicator in hazardous area, Ex- Protection: II 2 G, E Ex ib IIC T4
- ☞ Connect directly up to 4 weight cells (sum resistance bigger than 85 Ω) in hazardous area
- ☞ 5-digit 7- Segment display, 30 mm figure height
- ☞ Aluminium housing protection class IP65
- ☞ digital EEx i open collector output
- ☞ Optional signal transfer via 0/4 ...20 mA or TTY interface



Description

The scale terminal WT158 is a low cost indicator of a scale in hazardous area. It has a signal input for a weight cell a 5 digit 7 segment display and 4 keys. The the housing protection class of the WT158 against dust and humidity is IP65.

The front keys allow a direct net / gross / Tare switching as well as change of the weight dimension. The device can be configured and scaled by buttons and display.

Optional the WT158 has a TTY interface or an analogous 0/4 .. 20 mA output to transmit the weight data. The digital EEx i open collector output can be used for scale limit monitoring. If the scale exceeds the maximum (or the minimum) limit the output will change its state. It is possible to choose normal open or normal closed condition.

Technical Details

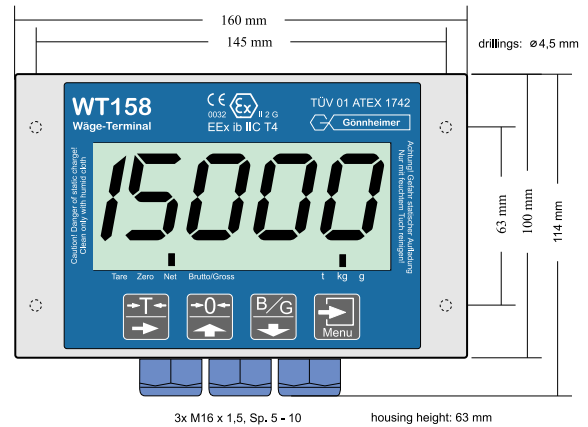
Ex- protection	E Ex ib IIC T4
Device group	II 2 G
EC- type examination c.	TÜV 01 ATEX 1742
Ambient temperature	-20°C ...+50°C T4
Mounting	Hazardous area, Zone1
Dimensions H x B x T	160 mm x 100 mm x 63 mm
Material	Aluminium
protection	IP65
Power supply: te. 1,2	U = 10 V, I = 20 mA + 10V / resistance weight cell(s)
EEx i Electrical limits	U _i = 30V, I _i = 110 mA, P _i = 2 W, C _i and L _i are negligible
Analogous output: te. 3,4	U ₀ = U _i an Kl.1, I ₀ = I _i at Kl.1, P ₀ = P _i (Kl.1), C ₀ = C ₀ (Kl.1) – 30 nF, L ₀ = L ₀ (Kl.1) – 40 µH
Digital output: te. 5,6	Passive, voltage drop app. 2 V U _i = 30V, I _i = 160 mA, P _i = 1,5 W, C _i negligible
Weight cell terminal	U ₀ = 5,9 V, I ₀ = I _i an Kl.1, P ₀ = 650 mW, C ₀ = 2 µF, L ₀ = L ₀ (Kl.1) – 40 µH
further limits	see EC- type examination certificate
Sample rate	8 Hz
Precision	0,03% v _E at 2mV/V
Temperature coefficient	0,015 % v _E each 10 K

Type code

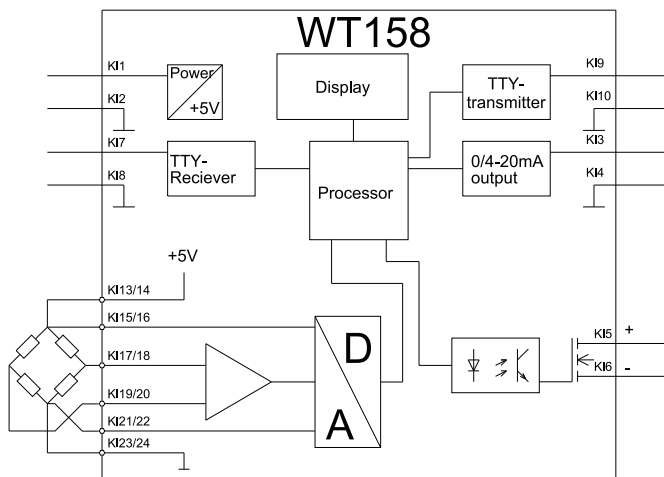
WT158	.x	.x	.x
Analogous output:			
Absent0		
Present1		
TTY- Receiver:			
Absent0		
Present1		
TTY- Transceiver:			
Absent0
Present1

Accessoires: power supply SG160

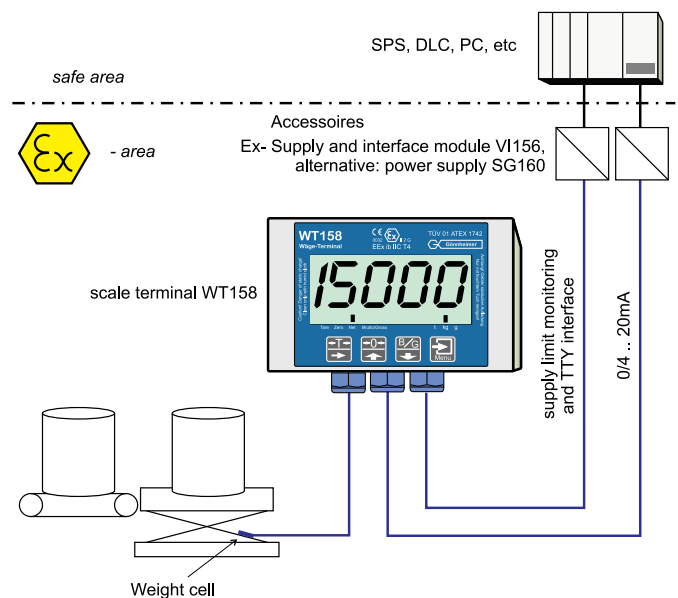
Dimensions



Block diagram



Application



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