

Technical Data Lambda Transmitter LT3



Fig. 1 LT3 housing with UI300-LT-V2



Fig. 2 LT3 in stainless steel housing with UI300-LT-V2 and additional cover for IP65

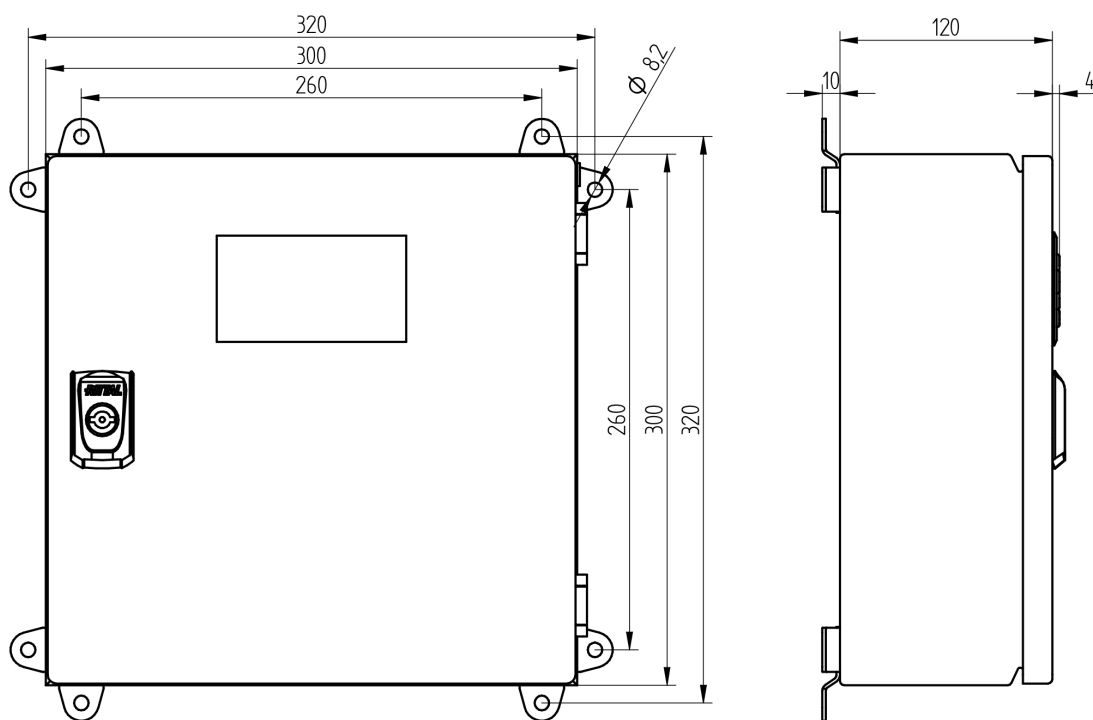


Fig. 3 Dimensional drawing LT3 housing with wall mounting vertical/horizontal and UI300-LT-V2 (dimensions in mm)

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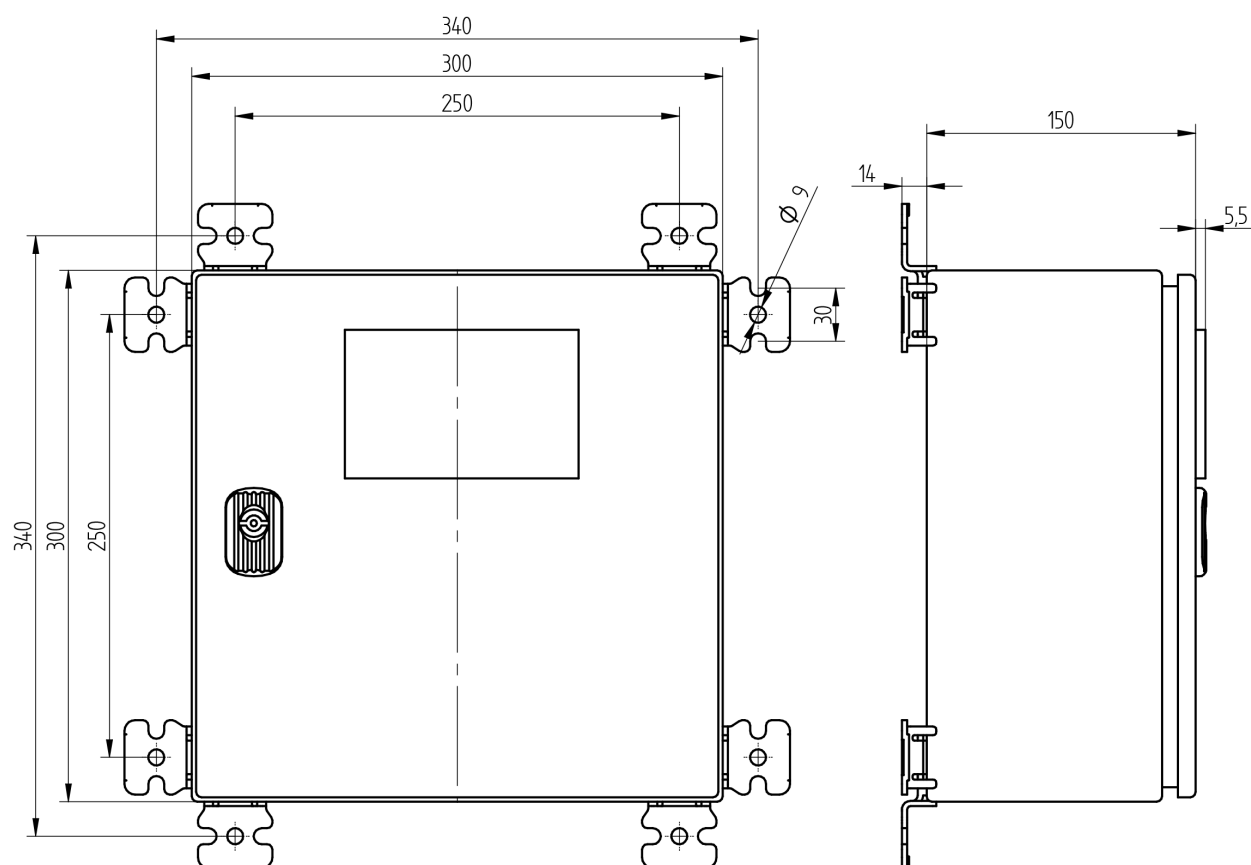


Fig. 4 Dimensional drawing LT3 in stainless steel housing with wall mounting vertical/horizontal and UI300-LT-V2 with additional cover for IP65 (dimensions in mm)

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LT3 at wall mounting housing with User Interface UI300-LT-V2

Housing	Mounting house of sheet steel, powder-coated
Dimensions (H x W x D)	300 x 300 x 120 mm 11.81" x 11.81" x 4.72" in
Colour	Light grey RAL 7035
Weight	approx. 6 kg 13.23 lb
Control elements	User Interface UI300-LT-V2 with LCD-Graphic Display 45 x 27 mm (WxH) 1.77" x 1.06" in (W x H) LSB-Remote-Software (Option)

LT3 in stainless steel housing with User Interface UI300-LT-V2

Housing	Mounting house of stainless steel 304L
Dimensions (H x W x D)	300 x 300 x 150 mm 11.81" x 11.81" x 5.91" in
Weight	approx. 6 kg 13.23 lb
Control elements	User Interface UI300-LT-V2 with LCD-Graphic Display 45x27 mm (BxH) 1.77" x 1.06" in (W x H) LSB-Remote-Software (Option)

Characteristics

Power supply	120 VAC / -30 % ... 230 VAC / +10 %, 50 ... 60 Hz Use only in earthed networks!
Power consumption	typically 30 W, max. 69 W
Resolution	O ₂ : 0.1 vol. % O ₂ CO _e : 1 ppm in CO range 0 ... 1,000 ppm
Time for operational readiness	In case of initial start-up of the probe 60 minutes, otherwise about 10 minutes after MAINS ON.

Interfaces

LAMTEC SYSTEM BUS (LSB)

Direct communication with LAMTEC burner control units	Transmission of measured values, warning and fault messages, receiving commands
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Field bus connection

Field bus connection to PROFIBUS DP via additional module	– Reading of values, statuses, faults, and warnings – Reset of faults and warnings – Setting of digital outputs
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Analogue outputs

Analogue outputs via additional module	Analogue output 1 (O ₂ measured value)
Precision: 1 %	– Setting range: 0 ... 25 % O ₂
Load: 300 Ω/output	– Factory setting: 0 ... 10 vol. % O ₂ → 4 ... 20 mA/fault 0 mA
	Analogue output 2 (CO _e measured value)
	– Setting range: 0 ... 30,000 ppm
	– Factory setting: 0 ... 1,000 ppm → 4 ... 20 mA/fault 0 mA

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Digital outputs

Digital outputs via additional module	– 4 floating contacts no, function adjustable via user interface – Switching voltage max. 250 V – Switching current 6 A, max. 12 A/module
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Digital inputs

Digital inputs via additional module	– 4 digital inputs 24 VDC, floating – Functions can be set via LSB remote software
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Efficiency calculation

Calculation of the combustion efficiency via additional module	– 2 Pt100 inputs for connecting of the flue gas and inlet air temperature 0 °C ... 400 °C 32 °F ... 752 °F – 2 analogue outputs 0/4 ... 20 mA for the output of the flue gas air temperature and efficiency
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Operating Conditions

Relative humidity	0 % ... 100 %
Installation height	< 2,000 m 6,561.68 ft above sea level

Environmental Conditions

Operation	perm. temperature range	-20 ... +60 °C -4 ... +140 °F
Transport	perm. temperature range	-40 ... +70 °C -40 ... +158 °F
Storage	perm. temperature range	-40 ... +70 °C -40 ... +158 °F
Degree of protection	according to DIN EN 40050	IP54 IP65 with additional cover

NOTICE

The limits of the technical data must be strictly adhered to.

EU Declaration of Conformity

2014/35/EU	Low Voltage Directive
2014/30/EU	EMC Directive
2011/65/EU	RoHS

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Order Information

NOTICE

Configuration for limit value and measured value output according to SIL1 available.

Description/Type	Order no.
Lambda Transmitter LT3 in wall mounting housing	657R51

A 10 – DISPLAY	Selection
WITH USER INTERFACE UI300-LT3-V2, IP54	20
WITH USER INTERFACE UI300-LT3-V2, IP65, installed in stainless steel housing 304L	40
WITH USER INTERFACE UI300-LT3-V2, IP65	50
WITH USER INTERFACE UI300-LT3-V2, IP54, UL approved Parameters can be changed up to release level SERVICE (2). Extended configuration only possible via LSB remote software for PC	UL20

A 20 – OUT-/INPUTS	Selection
WITHOUT OUT-/INPUTS	00
4 ANALOGUE OUTPUTS 0/4 ... 20 mA	05
4 ANALOGUE OUTPUTS 0/2 ... 10 V	10
4 DIGITAL OUTPUTS, FOR OUTPUT OF LIMIT VALUES AND OPERATING STATES	20
4 DIGITAL INPUTS	25
4 DIGITAL- AND 4 ANALOGUE OUTPUTS 4 ... 20 mA (required for SIL1 in combination with KS1D ECO/HT)	30
4 DIGITAL- AND 4 ANALOGUE OUTPUTS 0/2 ... 10 V (required for SIL1 in combination with KS1D ECO/HT)	35
4 DIGITAL INPUTS AND 4 ANALOGUE OUTPUTS 0/4 ... 20 mA	50
4 DIGITAL INPUTS AND 4 ANALOGUE OUTPUTS 0/2 ... 10 V	55
4 DIGITAL INPUTS, 4 DIGITAL- AND 4 ANALOGUE OUTPUTS 0/4 ... 20 mA	60

A 30 – LANGUAGE only relevant in combination with extended operating unit attribute A10 – selection 10	Selection
GERMAN	D
ENGLISH	E
FRENCH	F

A 40 – PROBE TYPE	Selection
KS1D ECO / KS1D BF (CO/O ₂ Monitoring)	00
KS1D-Ex (ATEX CO/O ₂ Monitoring)	01
LS2 ECO / LS2 BF (O ₂ Measurement)	LS2
LS2-Ex (ATEX O ₂ Measurement)	LS2EX

A 50 – RESERVE	Selection
WITHOUT	00

A 60 – EFFICIENCY CALCULATION	Selection
WITHOUT	00
EFFICIENCY-MODULE WITH 2 PT100-INPUTS AMBIENT AIR AND FLUE GAS 0 ... 400° C AND 2 ANALOGUE OUTPUTS 0/4 ... 20 mA	01

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A 70 – FIELD BUS CONNECTION

Select "01" when module should be built-in, otherwise use order no. 657R5950

Selection

WITHOUT	00
PROFIBUS DP	01

A 80 – CO_e MEASURING RANGE (only relevant for KS1D)

Selection

STANDARD CO _e MEASURING RANGE 0 ... 1.000 ppm	00
EXTENDED CO _e MEASURING RANGE 0 ... 10.000 ppm	01

External display and operation

Description/Type

Order no.

LSB Remote Software for PC up from Windows XP, incl. connecting cable for LT3/LT3-F, length 4 m 13.12 ft, with USB/CAN module	657R9000
If LSB Remote Software and USB / CAN module available for BT300: connecting cable for LT3 / LT3-F, length 4 m 13.12 ft	657R0426

* When ordering please specify the language



For 120 VAC only

The information in this publication is subject to technical changes.



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