

## Technical Data Lambda Transmitter LT3-F



Fig. 1 LT3-F housing with UI300-LT-V2



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

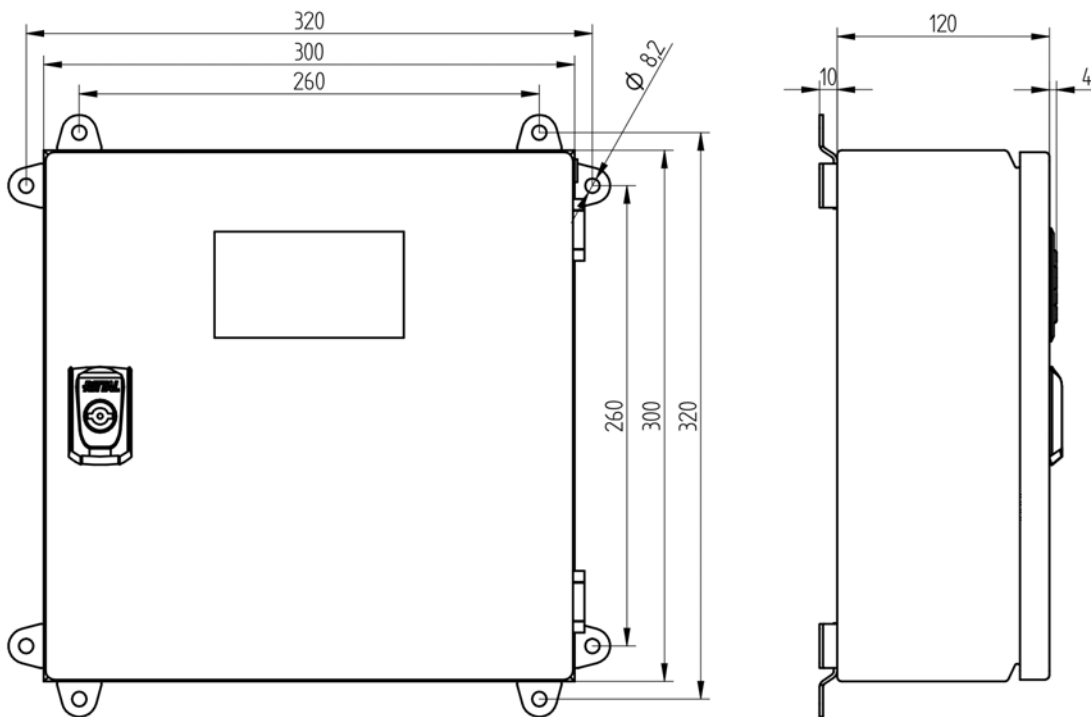


Fig. 3 Dimensional drawing LT3-F housing with wall mounting vertical/horizontal and UI300-LT-V2 (dimensions in mm)

## Technical Data Lambda Transmitter LT3-F

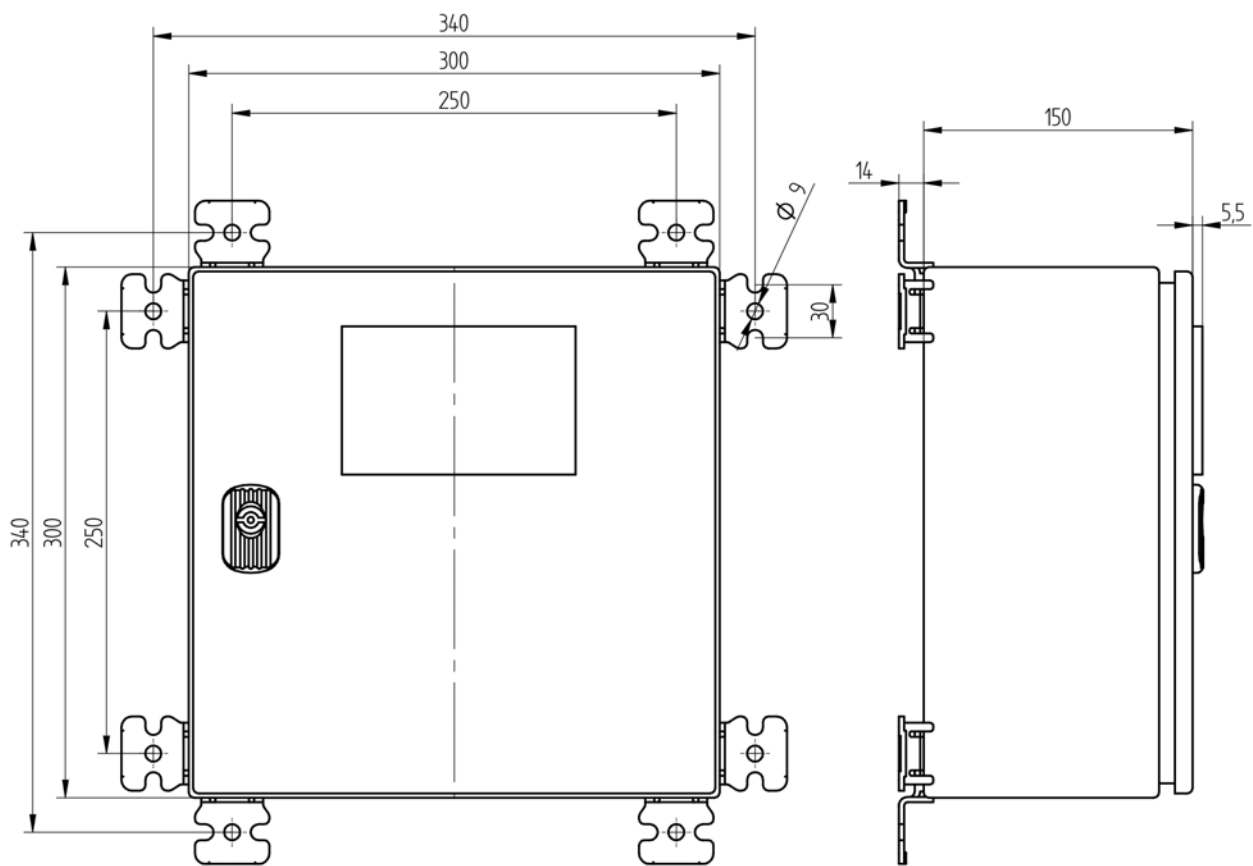


Fig. 4 Dimensional drawing LT3-F in stainless steel housing with wall mounting vertical/horizontal and UI300-LT-V2 with additional cover for IP65 (dimensions in mm)

## Technical Data Lambda Transmitter LT3-F

### LT3-F 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-F 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 <b>Use only in earthed networks!</b>
Power consumption	typically 30 W, max. 69 W
Resolution	O <sub>2</sub> : 0.1 vol. % O <sub>2</sub> CO <sub>e</sub> : 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
---	---

#### Field bus connection

Field bus connection to PROFIBUS DP via additional module	<ul style="list-style-type: none"> <li>– Reading of values, statuses, faults, and warnings</li> <li>– Reset of faults and warnings</li> <li>– Setting of digital outputs</li> </ul>
---	---

#### Analogue outputs

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

## Technical Data Lambda Transmitter LT3-F

### Digital outputs

Digital outputs via additional module	<ul style="list-style-type: none"><li>– 4 floating contacts no, function adjustable via user interface</li><li>– Switching voltage max. 250 V</li><li>– Switching current 6 A, max. 12 A/module</li></ul>
---------------------------------------	---

### Digital inputs

Digital inputs via additional module	<ul style="list-style-type: none"><li>– 4 digital inputs 24 VDC, floating</li><li>– Functions can be set via LSB remote software</li></ul>
--------------------------------------	--

### Efficiency calculation

Calculation of the combustion efficiency via additional module	<ul style="list-style-type: none"><li>– 2 Pt100 inputs for connecting of the flue gas and inlet air temperature 0 °C ... 400 °C   32 °F ... 752 °F</li><li>– 2 analogue outputs 0/4 ... 20 mA for the output of the flue gas air temperature and efficiency</li></ul>
--	---

### Operating Conditions

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

### Environmental Conditions

<b>Operation</b>	perm. temperature range	-20 ... +60 °C   -4 ... +140 °F
<b>Transport</b>	perm. temperature range	-40 ... +70 °C   -40 ... +158 °F
<b>Storage</b>	perm. temperature range	-40 ... +70 °C   -40 ... +158 °F
<b>Degree of protection</b>	according to DIN EN 40050	IP54 IP65 with additional cover
<b>CE Declaration of Conformity</b>	2014/35/EU	Low Voltage Directive
	2014/30/EU	EMC Directive
	2011/65/EU	RoHS Directive

### NOTICE

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

# Technical Data Lambda Transmitter LT3-F

## Order Information

### NOTICE

Lambda-Transmitter LT3-F not usable as stand-alone-device.

SIL2-certification only in combination with LAMTEC-devices ETAMATIC, FMS, VMS, BT300, CMS and CO/H<sub>2</sub>-control !

**Lambda-Transmitter LT3-F in wall mounting housing, RAL7035, for the simultaneous measurement of the concentration of O<sub>2</sub> and oxidizing gas components (CO/H<sub>2</sub>), displayed as CO<sub>e</sub>**

Description/Type	Order no.
Lambda Transmitter LT3-F in wall mounting housing	657R50

A 10 – DISPAY	Selection
WITH USER INTERFACE UI-300-LT3-V2, IP54	20
WITH USER INTERFACE UI-300-LT3-V2, IP65	30
WITH USER INTERFACE UI-300-LT3-V2, IP65, installed in stainless steel housing 304L	40
WITH USER INTERFACE UI-300-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 0/4 ... 20 mA	30
4 DIGITAL- AND 4 ANALOGUE OUTPUTS 0/2 ... 10 V	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 40 – HART-COMMUNICATION (in preparation)	Selection
WITHOUT	00

A 50 – EFFICIENCY CALCULATION	Selection
WITHOUT	00
EFFICIENCY-MODULE WITH 2 PT100-INPUTS AMBIENT AIR AND FLUE GAS 0...400°C 2 ANALOGUE OUTPUTS 0/4 ... 20 mA	01

A 60 – FIELD BUS CONNECTION Select "01" when module should be built-in, otherwise use order no. 657R5950	Selection
WITHOUT	00
PROFIBUS DP	01

Additional required:

- Combination probe KS1D ECO in standard housing, order no. 656R2000 / 656R2002, and accessories.
- or
- Combination probe KS1D-HT, order no. 656R2015 / 656R2018, and accessories

# Technical Data Lambda Transmitter LT3-F

## External display and operation

Description/Type	Order no.
LSB Remote Software for PC up from WIN XP, incl. connection cable 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

## Approvals



The information in this publication is subject to technical changes.



**LAMTEC Meß- und Regeltechnik  
für Feuerungen GmbH & Co. KG**

Josef-Reiert-Straße 26

D-69190 Walldorf

Telefon: +49 (0) 6227 6052-0

Telefax: +49 (0) 6227 6052-57

[info@lamtec.de](mailto:info@lamtec.de)  
[www.lamtec.de](http://www.lamtec.de)

