

**Certificate Holder:** f.u.n.k.e. AVIONICS  
Magirusstraße 39/1  
89077 Ulm  
Germany



BNetzA-bS-02/51-52

authorized by the German Government to act as Notified Body in accordance with the RE Directive 2014/53/EU of 16 April 2014.

**Product Manufacturer:** See Certificate Holder

**Product Designation:** TM350

**Product Description:** Traffic monitor with GPS, WLAN, Flarm and 1090MHz (receive only)

**Conformity Assessment:**

Essential requirements	Examined documentation	Result
Safety RED, Article 3.1a	Technical documentation including test report	conform
Health RED, Article 3.1a	Technical documentation including test report	conform
EMC RED, Article 3.1b	Technical documentation including test report	conform
Radio spectrum RED, Article 3.2	Technical documentation including test report	conform

**EU Type Examination Certificate:**

In accordance with Annex III of the European Council Directive 2014/53/EU on radio equipment, our opinion is that this equipment type complies with the essential requirements stated above.

**Marking:**

The product shall be marked with the CE marking as required in the Council Directive 2014/53/EU.

**Annexes:**

The certificate is only valid in conjunction with the following number of annexes: 1

**Validity:**

Conformity is provided unless changes/modifications have been done to the standard and/or assessed type of equipment.

**Certificate Registration No.:**

T818972P-01-TEC

**CE 0682**

CTC advanced GmbH



Saarbrücken

Authorized signature / title

## Product Characteristics:

<b>Hardware version:</b>	HW100		
<b>Software version:</b>	Firmware Version: 0.01 Software Version MicroBlaze: 0.03 Software Version HMI: 0.03 FLARM ATOM: 7.04_33320bd70		
<b>Bluetooth® Bluetooth® LE part:</b>			
Operating frequency range:	2400 – 2483.5 MHz	EIRP:	≤ 10 dBm
Number of channels:	79 / 40	Modulation:	GFSK, π/4-DQPSK, 8-DPSK
<b>IEEE 802.11a/b/g/n/ac part:</b>			
Operating frequency range:	2400 – 2483.5 MHz	EIRP:	≤ 20 dBm
Number of channels	13	Modulation:	DSSS, OFDM
<b>868MHz part:</b>			
Operating frequency range:	868.0 – 868.6 MHz	ERP:	≤ 11.58 dBm
Number of channels	1	Modulation:	GFSK
Operating channel width	200 kHz		
Receiver category	2		
<b>1090 MHz part (receive only):</b>			
Operating frequency range:	1090 MHz		
Number of channels	1		
<b>GNSS part:</b>			
GPS operating frequency:	1559 – 1610 MHz (L1)	Modulation:	BPSK
Glonass operating frequency:	1559 – 1610 MHz (G1)		BPSK
Galileo operating frequency:	1559 – 1610 MHz (E1)		BOCcos, AltBOC(15,10)
BDS (Beidou) operating frequency:	1559 – 1610 MHz (B1)		BPSK
SBAS operating frequency:	1559 – 1610 MHz (L1)		BPSK
<b>Other characteristics:</b>			
Operating temperature	-20 – 55 °C		
Power supply	11 – 30Vdc (9 – 32Vdc extended). Nominal: 14Vdc and 28Vdc		

## Conformity Assessment:

### Evaluated test reports

Essential requirements	Examined documentation
	<b>EN 62368-1: 2014/AC: 2015/A11: 2017/AC:2017</b>
<b>Safety</b>	-No.: 1-2691/21-01-02 issued by CTC advanced GmbH -No.: B2004279 issued by NB 1313
<b>Health</b>	<b>EN 62479:2010, EN 62311:2008, Council Recommendation 1999/519/EC</b>  -No.: B2004279 issued by NB 1313
<b>EMC</b>	<b>EN 301 489-1 V2.2.3, EN 301 489-3 V2.1.1, EN 301 489-17 V3.2.2, EN 301 489-19 V2.1.0, EN 55032:2021</b>  -No.: B2004279 issued by NB 1313 -No.: WTX21X05045269W-2 issued by Waltek Testing Group (Shenzhen) Co., Ltd. -No.: f.u.n.k.e.AVIONICS GmbH-TM 350.en/Rev.0/07.2021 issued by hummel electronic
<b>Radio spectrum</b>	<b>EN 300 328 V2.2.2, EN 300 440 V2.1.1, EN 303 413 V1.1.1, EN 300 220-1 V3.1.1, EN 300 220-2 V3.1.1, Selection of test cases according article 3.2.</b>  -No.: f.u.n.k.e.AVIONICS GmbH-TM 350.en/Rev.0/07.2021 issued by Hummel electronic -No.: B2004279 issued by NB 1313 -No.: WTX21X05045265W issued by Waltek Testing Group (Shenzhen) Co., Ltd

### Miscellaneous:

- TD according to the application
- This Type Examination Certificate is only valid for the Radio Equipment Directive. Other directives was not part of this document.