



# CONVECTIVE HEAT FLOW



Non-Contact Temperature Measurement  
without Optics

**WIRE TEMPERATURE  
MEASUREMENT**

LUNE-CHF  
WIRETEMP (WT)

[www.lune-chf.com](http://www.lune-chf.com)

# WIRETEMP (WT)

## WIRE TEMPERATURE MEASUREMENT

- Non-contact and precise temperature measurement in a temperature range from 10° to 300°C (50° to 572°F) at cables and wires using the Convective Heat Flow principle (without optics). The WIRETEMP sensor heads cover diameters from 0.075 mm to 7.00 mm (0.005" to 0.28"). For maximum precision of measurement they are equipped with 8 sensors.
- The measurement is independent of influencing factors like colour, emission, speed, material, surface structure and varying distances between sensor head and wire.
- The double head design allows auto calibration of the system. The measurement system is maintenance-free.



### 1. SENSOR HEADS

Model numbers / versions

- CHH7506-WT-X1                    0.075 to 1.25 mm, (0.003" to 0.05") 8 sensors
- CHH7501-WT-X1                    0.305 to 2.30 mm, (0.012" to 0.09") 8 sensors
- CHH7505-WT-X1                    2.000 to 5.00 mm, (0.05" to 0.20") 8 sensors
- CHH7509-WT-X1                    4.000 to 7.00 mm, (0.16" to 0.28") 8 sensors

X1 = LV = heating cartridge voltage of 120 VAC, without code = 230 VAC (standard)

#### 1.1 INTERCONNECTION CABLE

- ICC300                                Interconnection cable between electronics and sensor head  
Standard cable length 3 m (9.8 ft)
- IPC500                                Interpanel cable between EPC-1 electronics and EPC-2 panel-PC  
Standard cable length 5 m (16.4 ft)

#### 1.2 TECHNICAL DATA\*

SENSOR HEAD

Measurement range:	10° to 300° C (50° to 572°F)
Head speed:	unlimited
Power supply:	230 VAC (standard) or 120 VAC (LV code) from electronics via ICC cable
Power input:	600 VA max. for 5 min, usually approx. 80 VA depending on sensor head temperature

\* for further technical details pls. refer to the operating manual

### 2. LUXTRON AND IRCON SENSOR HEADS

Existing Luxtron and Ircon heads can be connected to the new lune-CHF electronics. In some cases a new ICC cable with adapter will be required. In addition, lune GmbH offers a repair and calibration service for all CHF heads manufactured by Luxtron and Ircon.

### 3. ELECTRONICS

The electronics is available in following versions:

- ❶ CHE8000-EIP                    **Portable electronics - (remote electronics with integrated panel PC)**
- ❷ CHE8000-EPC-1                **Remote electronics**
- ❸ CHE8000-EPC-2                **Panel-PC**

### 3.1 ASSEMBLY TYPES / NETWORK CONNECTION

Electronics versions CHE8000-	TT	PM	SM	DIN	19"	LAN
EIP	✓	optional	N. A.	N. A.	optional	optional
EPC-1	N. A.	optional	✓	✓	optional	N. A.
EPC-2	✓	optional	optional	optional	optional	optional

(The panel PC EPC-2 is not mandatory for the operation of the measurement system)

- ✓ = Standard
- TT = tabletop unit with folding feet or rubber feet (tabletop)
- PM = mounting in control panel cut-out (panel mount)
- SM = mounting on control panel or rear panel (surface mount)
- DIN = mounting on DIN C-rail
- 19" = mounting in 19" rack
- LAN = network connection



2 CHE8000-EPC-1



1 CHE8000-EIP



3 CHE8000-EPC-2

### 4. TECHNICAL DATA\*

#### ELECTRONICS

<b>Display:</b>	7" TFT colour display with resistive touch panel (only models EIP and EPC-2)
<b>Accuracy:</b>	+/- 0,50% of full scale
<b>Repeatability:</b>	+/- 0,25% of full scale
<b>Resolution:</b>	+/- 1° C (°F)
<b>Time constant:</b>	< 1 sec
<b>Output:</b>	0/4 - 20 mA, 0 - 10 VDC, -5 to +5 VDC (temperature difference)
<b>Interfaces:</b>	RS422; USB 2.0; optional LAN via panel PC
<b>Temperature:</b>	0° - 45° C (32° - 113°F)
<b>Power supply:</b>	110 VAC / 230 VAC; 50 / 60 Hz; range 85 - 264 VAC, 47 - 63 Hz
<b>Power input:</b>	approx. 15 W

\* for further technical details pls. refer to the operating manual

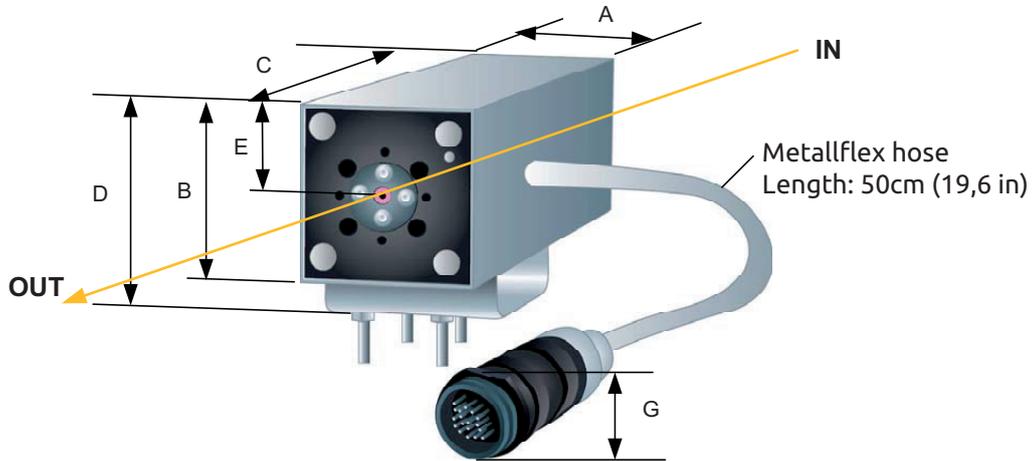
## 5. Dimensions

### Heads CHH750X-WT

#### Dimension / weight

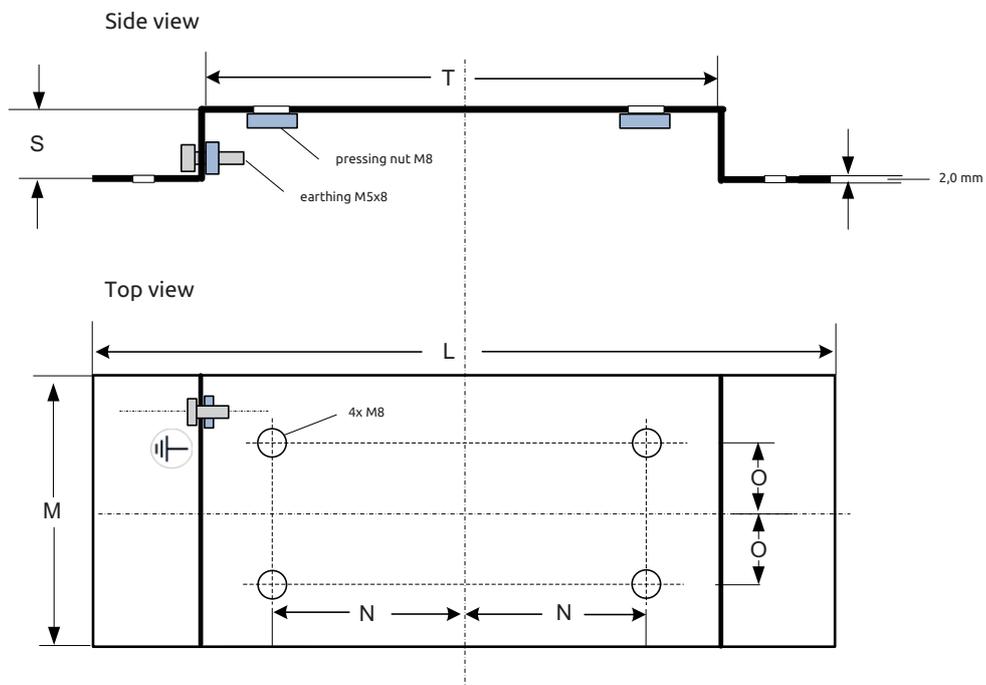
Dimensions and weight are identical for following head types:  
CHH7506-WT, CHH7501-WT, CHH7505-WT, CHH7509-WT

#### Dimensions head in mm (in)



Model	A	B	C	D	E	G
CHH750X-WT	79,5	79,5	187,0	99,5	39,8	47,1
	(3,12")	(3,12")	(7,36")	(3,91")	(1,56")	(1,85")

#### Dimensions mounting bracket head in mm (in)



Model	L	M	N	O	S	T
CHH750X-WT	174,0	75,0	42,0	20,0	20,0	120,0
	(6,85")	(2,95")	(1,65")	(0,78")	(0,78")	(4,72")