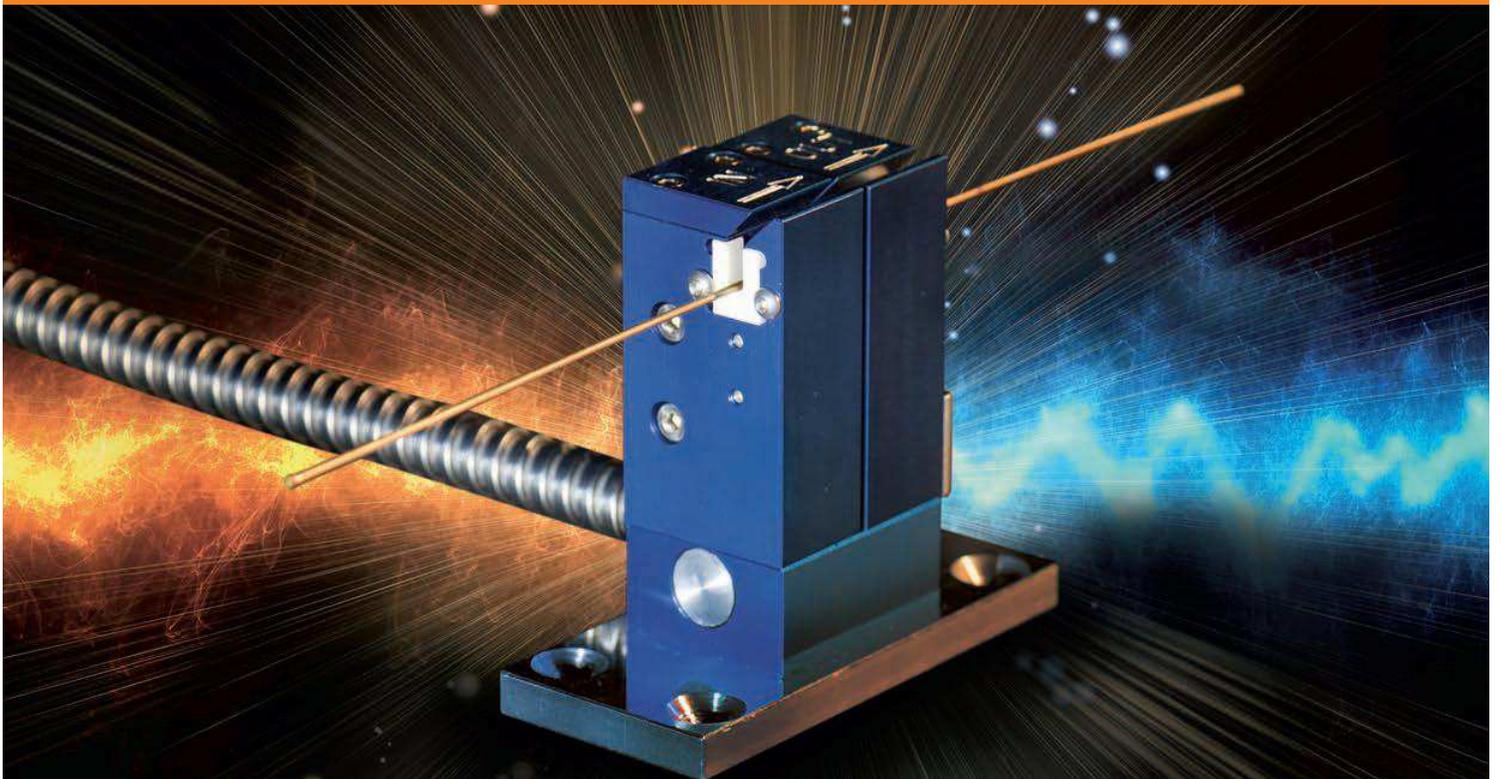




## CONVECTIVE HEAT FLOW



Non-Contact Temperature Measurement  
without Optics

### WIRE TEMPERATURE MEASUREMENT

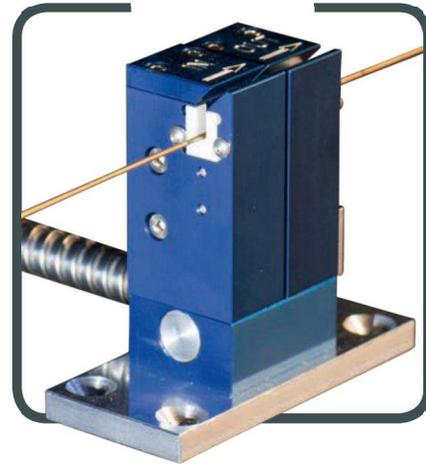
LUNE-CHF  
WIRETEMP SH (WTSH)

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

# WIRETEMP SH (WTSH)

## WIRE TEMPERATURE MEASUREMENT

- The small WIRETEMP SH allows non-contact temperature measurement in a temperature range from 10° to 300°C (50° to 572°F), 400°C (752°F) on request, at cables using the Convective Heat Flow principle (without optics). At low speeds a contact-free measurement is effected, at higher speeds >400m/min (1300 ft/min) the measurement is effected by contact via ceramic guides. The sensor head is suitable for diameters from 0.60 mm to 3.00 mm (0.024" to 0.12").
- The measurement is independent of influencing factors like colour, emission, speed, material, surface structure and varying distances between sensor head and wire.
- The sensor head is slotted and can be exchanged without interruptions. Due to its very small dimensions the WTSH is suitable for multi wire applications.
- The double head design allows auto calibration of the system. The measurement system is maintenance-free.



### 1. SENSOR HEAD

Model number / version

- CHH7701-WTSH-X1-X2      0.60 to 3.00 mm (0.024" to 0.12"), 2 sensors, slotted sensor head

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

X2 = HT = temperature measurement range up to 400°C (752°F)

#### 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), up to 400°C (752°F) as HT version
Head speed:	max. 800 m/min (2620 ft/min)
Power supply:	230 VAC (standard) or 120 VAC (LV code) from electronics via ICC cable
Power input:	150 VA max. for 5 min, usually approx. 20 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 lüne-CHF electronics. In some cases a new ICC cable with adapter will be required. In addition, lüne 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:

- CHE8000-EIP      Portable electronics - (remote electronics with integrated panel PC)
- CHE8000-EPC-1      Remote electronics
- 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

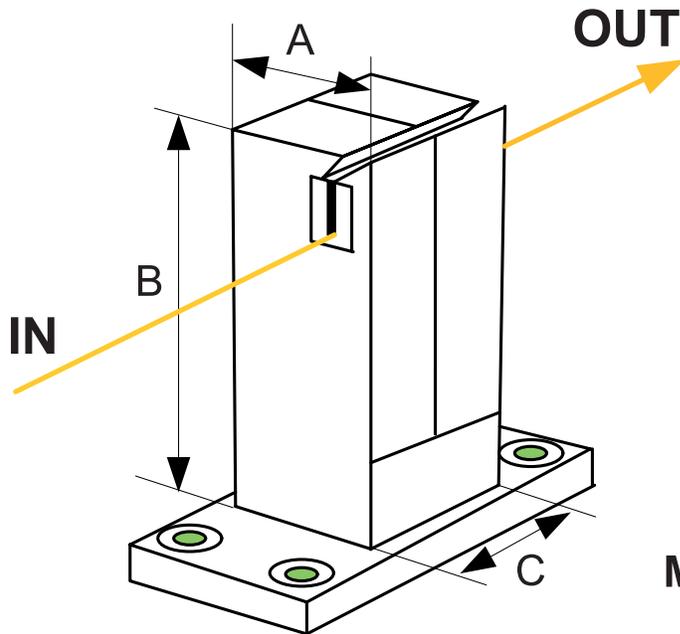
<b>Display:</b>	7" TFT colour display with resistive touch panel (only models EIP and EPC-2)
<b>Accuracy:</b>	+/- 1,0% of full scale
<b>Repeatability:</b>	+/- 0,5% of full scale
<b>Resolution:</b>	+/- 2° C (°F)
<b>Time constant:</b>	< 1 sec
<b>Output:</b>	0/4 - 20 mA, 0 - 10 VDC, -5 to +5 VDC (temperature 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

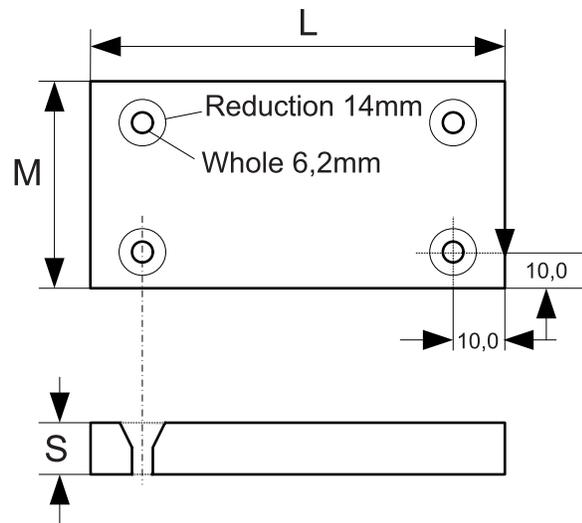
## 5. Dimensions

Head WIRETEMP CHH770X-WTSH, slotted  
Dimensions / weight

Dimensions head WIRETEMP WTSH in mm (in)



### Mountingplate



Model	A	B	C	L	M	S
CHH770X-WTSH	35,0 (1,37")	82,5 (3,24")	45,0 (1,77")	100,0 (3,93")	45,0 (1,77")	8,0 (0,31")

Dimensions in mm; (inch)  
Weight WTSH: 0,9 kg; (1,98 lbs)