# IRtech Radiamatic IR40 VLS 160

# Video TRX 2-wire Smart Process Infrared Thermometers



- Temperature range up to 1600°C
- Optical resolution up to 300:1 Close focus 0,5mm
- $1.6 \mu m$ Spectral response
- Video+Dual laser true target pointer
- 2-wire 4-20mA
- Alarm output
- Up to 70°C of ambient temperature without cooling
- 10mS response time
- Emissivity settings on board
- Connector with cable
- USB interface with IR Settings Windows software



IRtech Radiamatic IR40 series is a 2-wire smart infrared thermometer. The unit is powered by the loop providing scalable output on 4-20 mA. An USB interface is available for direct PC connection for online operation or setting through the software. An alarm output is available to avoid the use of an additional panel meter. The smart signal processor allow fast measurements applying also digital filters like average or advanced procedure as pick picker and hold. The dual laser aiming simplify the alignment of the thermometer on the target identifying the real area of measurement. The laser can be powered and switched on directly by keyboard or remotely by digital interface. Video output can be used for aiming in addition to laser pointer.

Features are related to all models equipped with full configuration. On the software in the software through the software. An alarm output is available to avoid the use of an additional panel meter. The smart signal



# IRtech Radiamatic IR40 VLS 160

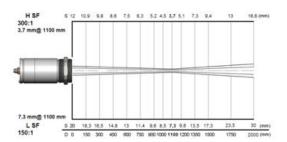
Video TRX 2-wire Smart Process Infrared Thermometers

# **Models**

#### LS 160L LS 160H **Models** 200 - 800 °C 385 - 1600 °C Temperature range ±(0,3% rdg or ±2°C) \* ±(0,3% rdg or ±2°C) " Accuracy 23°C±5°C Repeatability 23°C±5°C ±(0,1% or ±1°C) \*\* ±(0,1% or ±1°C) \*\* 300:1 300:1 D:S target ratio Response time 10 mS 10 mS Spectral response 1.6 µm 1,6 µm

#### \* whichever is greater

\*\* E=1, response time 1s



# IR 40 LS 160H optics

FF	12 mm@ 3600 mm
SF	3,7 mm@ 1100 mm
CF2	0,5 mm@ 150 mm
CF3	0,7 mm@ 200 mm
CF4	1,5 mm@ 450 mm

# Common specifications

#### Emissivity / Gain / IR windows :

Adjustable 0.100 - 1.000

# Working temperature:

-20 to  $\pm 70^{\circ}\text{C}$  / 10-95% RH non condensing (50°C with laser on). Storage -20 to  $\pm 85^{\circ}\text{C}$ 

# Vibration & Shock:

IEC 68-2-6: 3G. 11-200Hz, any axis IEC 68-2-27: 50G, 11mS, any axis

# **Environmental rating:**

IP65 (NEMA-4)

#### Analog output:

2-wire 4-20mA on 1000 ohm loop

#### Digital output:

Open collector alarm 0-30V / 500mA Uni-bidirectional 0/3V digital - USB optional

# Power supply:

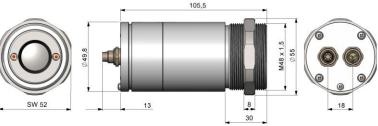
8..28 V DC (Laser 12mA@24V)

#### **Functions:**

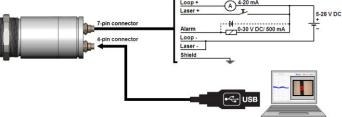
Peak hold, Valley hold, average, extended hold, threshold and hysteresis.

#### Video:

640x480 pixel,  $3,1^{\circ}x2,4^{\circ}$  FOV, 30 Hz











# Cooling Jacket

# 100,00

# IR Settings Windows Software

Software allows sensor setup and remote control. The real time graphic display and datalogging show the temperature trends with 1mS sampling.

| 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0

# **Ordering Code**

Code		Mode	eı			
IR40	IRtech IR40 includes mounting nut and bracket ACCTLFB & instruction manual.					
- 1	Table A Range					
	VLS 160L 200 to 800°C			-		
	VLS	VLS 160H385 to 1600°C			5mt USB cable with	
				Windows IR Setting software included		
					Windows in colling contrars included	
		Table B	Opt	ics		ice
		SF	Stan	dard focu	s optic	100
		CFx	Clos	e focus or	ptic	m
		FF F	Farc	distance o	otic	iŧ
		١.		Damani	of Onlike and on	<b>≥</b>
			lable C	кероп	of Calibration	ng
			0	none		ha
			CC	EA trac	eable with data	2
				Table D	Connector + Cable	Specifications may change without notice
				C3	Connector with 3mt cable	00
				C5	Connector with 5mt cable	sati
				C10	Connector with 10mt cable	zific
				HT	HT cable model	be
IR40	- LS 160	DH - SF -	0 -	СЗНТ	Typical ordering code	S
					,,	