

IMPAC SERIES 6-TVD ADVANCED

Stationary, digital pyrometers for non-contact temperature measurement with video sighting for optical alignment to the measuring object.



AT A GLANCE

Available Models

IS 6-TVD Advanced
IGA 6-TVD Advanced
IGA 6/23-TVD Advanced
ISR 6-TVD Advanced
IGAR 6-TVD Smart

Video Signal

Pyrometer: FDP-Link III
VideoProcessingBox: 100 Mbit
Ethernet (UDP)

Field of View

About 5.8% x 4.2% of adjusted
measuring distance
OV7960: 4752 x 3552 μm^2
AR0147AT: 4030 x 2900 μm^2

Resolution

OV7960: 768 x 576 pixel
Visible: 768 x 520 pixel
AR0147AT: 1344 x 968 pixel

The Impac® Series 6-TVD Advanced pyrometers are digital, compact, and fast pyrometers for non-contact temperature measurement. With a color camera module, the optical alignment to the measuring object can be achieved with a monitor in conjunction with a Video Processing Box. The video image can be displayed either using the complimentary InfraWin Software or via Ethernet. The inserted circular target marker allows an exact alignment to the measuring object.

PRODUCT HIGHLIGHTS

- Integrated color camera module for sighting
- Optical alignment to the measuring object using the video image
- Video output galvanically isolated from power supply, analog output, and digital interface
- Display image details including: current temperature reading, date/time, user text, one selectable parameter

TYPICAL APPLICATIONS

- Metal processing
- Steel making
- Glass industry
- Cement industry
- Solar industry

TECHNICAL DATA¹

Video Signal	Pyrometer: FPD-Link III VideoProcessingBox: 100 Mbit Ethernet (UDP)
Date/Time	Real time clock
Operating Ambient Temperature	0 to 60°C on the housing
Field of View	About 5.8% x 4.2% of adjusted measuring distance OV7960: 4752 x 3552 μm^2 AR0147AT: 4030 x 2900 μm^2
Superimposed Text Elements	Circular target marker, user text, time, date, measured temperature Additional: device temperature or distance or serial number or intensity (only ISR and IGAR)
Resolution	OV7960: 768 x 576 pixel Visible: 768 x 520 pixel AR0147AT: 1344 x 968 pixel
Brightness control	Automatic or manual (via software)

¹ Different from / In addition to IS 6 Advanced, IGA 6 Advanced, IGA 6/23 Advanced, ISR 6 Advanced, and IGAR 6 Smart

OPTICS

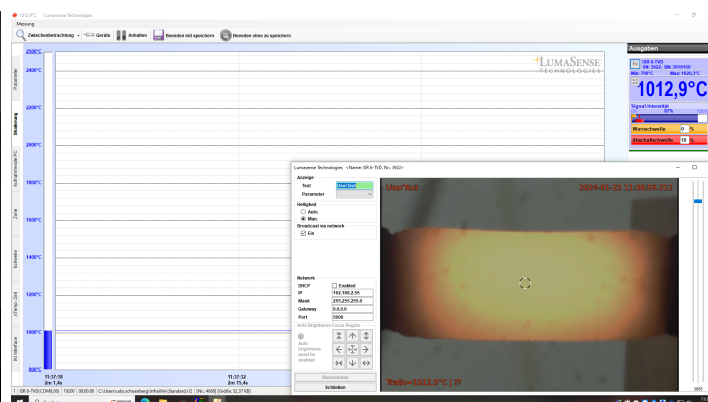
The Series 6 Pyrometers can be manually adjusted at all distances between 210 mm and 5000 mm and the focus distance of the visual camera equals the focus distance of the infrared detector. The size of the target marking circle displayed in the video image equals the spot size of the pyrometer at the set measuring distance. For spot sizes, please refer to the datasheet for the associated Series 6 base instrument (IS 6 Advanced, IGA 6 Advanced, IGA 6/23 Advanced, ISR 6 Advanced, or IGAR 6 Smart).

INFRAWIN OVERVIEW

InfraWin is easy-to-use measurement and evaluation software for remote configuration of stationary, digital IMPAC brand pyrometers.



Example video image



InfraWin software screenshot

REFERENCE NUMBERS

Type ¹	Temperature Range	Reference Number
IS 6-TVD Advanced (RS485)	600 to 1800°C (1112 to 3272°F) (MB 18)	3 919 090
	600 to 3000°C (1112 to 5432°F) (MB 30)	3 919 100
IGA 6-TVD Advanced (RS485)	250 to 1800°C (482 to 3272°F) (MB 18)	3 919 010
	250 to 2500°C (482 to 4532°F) (MB 25)	3 919 020
IGA 6/23-TVD Advanced (RS485)	50 to 1000°C (122 to 1832°F) (MB 10)	3 919 060
	75 to 1300°C (167 to 2372°F) (MB 13)	3 919 070
	150 to 1800°C (302 to 3272°F) (MB 18)	3 919 080
ISR 6-TVD Advanced (RS485)	600 to 1400°C (1112 to 2552°F) (MB 14)	3 919 110
	700 to 1800°C (1292 to 3272°F) (MB 18)	3 919 120
	800 to 2500°C (1472 to 4532°F) (MB 25)	3 919 130
	1000 to 3000°C (1832 to 5432°F) (MB 30)	3 919 140
IGAR 6-TVD Smart (RS485)	100 to 2550°C (212 to 4622°F)	3 919 050

¹ RS232 versions on request.

Scope of Delivery

Pyrometer, PC software InfraWin for adjustment and evaluation, Works Certificate, and manual.

Ordering Note

Video Processing Box, connection and video cables are not included in the scope of delivery and must be ordered separately.

ACCESSORIES

PN	Description
3 919 500	Video Processing Box (RS485) for instruments with TV digital (-TVD)
3 919 510	Video Processing Box (RS232) for instruments with TV digital (-TVD)
3 920 850	Video cable f. Series 6-TVD (TV digital), 5m
3 920 860	Video cable f. Series 6-TVD (TV digital), 10m
3 920 870	Video cable f. Series 6-TVD (TV digital), 15m
3 920 880	Video cable f. Series 6-TVD (TV digital), 20m
3 920 890	Video cable f. Series 6-TVD (TV digital), 25m
3 821 420	Extension cable / VideoProcessingBox conn. cable, 12 pin, straight plugs, 5 m
3 920 500	Extension cable / VideoProcessingBox conn. cable, 12 pin, straight plugs, 10 m
3 821 930	Extension cable / VideoProcessingBox conn. cable, 12 pin, straight plugs, 15 m
3 920 510	Extension cable / VideoProcessingBox conn. cable, 12 pin, straight plugs, 20 m
3 920 520	Extension cable / VideoProcessingBox conn. cable, 12 pin, straight plugs, 25 m



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ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

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