

SR-SERIES



Extremely affordable, analog thermal security cameras with excellent range performance

The SR-Series feature the same thermal imaging technology found in many of FLIR's most sophisticated security and surveillance systems, but are packaged for users who have mid-range security and surveillance as their primary application. The SR-Series are excellent tools to install in new or existing security installations. They just need power and connection to a screen.

320
x
240

or
160
x
120

Crisp thermal images – choice of image quality

The SR-Series are using the most advanced thermal imaging technology available on the market today. They incorporate an uncooled Vanadium Oxide microbolometer detector producing crisp 320 x 240 pixels thermal images. Users that do not require this high image quality can choose for a 160 x 120 detector.

More pixels allow the user to see more detail and to detect more and smaller objects. Advanced internal camera software delivers a crisp image without the need for user adjustments. It provides high quality thermal imaging in any night- or daytime environmental conditions.



Excellent range performance

Equipped with a 100 mm lens, the SR-Series is designed for mid-range security and surveillance applications. The SR-304 has a 4° field of view. With the SR-304 you will be able to detect a man-sized target at a distance of over 2 km.



Digital Detail Enhancement

The SR-Series provide high contrast imagery optimized to get the most out of video analytics software. Digital Detail Enhancement ensures clear, properly contrasted thermal images in all weather conditions.



Easy to use

Equipped with an "athermal lens", all SR-Series are able to maintain focus no matter what the environmental temperature is. There is no need for user adjustments.



No maintenance needed

The absence of a motorized focus mechanism prevents mechanical break downs. The SR-Series do not need any maintenance whatsoever. This guarantees an extremely low total cost of ownership.



Easy-to-install

All SR-Series can be easily connected to common power and video interfaces found in existing and new security systems. They can be easily integrated into any existing CCTV infrastructure providing early detection and visibility 24/7 all the year round. The images from the 320 x 240 or 160 x 120 pixels detector can be displayed on virtually any existing display that accepts composite video.



Designed for use in harsh environments

The SR-Series are extremely rugged systems. Their vital core is well protected, meeting IP66 requirements, against dust and water ingress.



Serial control interface

For easy integration in analog video environments. Serial control and analog composite video output enable ready integration into legacy network designs.



Extremely affordable

The SR-Series come at an extremely affordable price. From now on, price is no longer an object to integrate thermal imaging into your new or existing video security networks.



All SR-series thermal imaging cameras can be easily installed and integrated in existing CCTV networks



SR-348

SR-313

SR-304

Different lens options available

The following table gives an overview of the available SR-Series versions

	Available lens options
160 x 120 pixels	SR-124: 9 mm lens – FOV: 24°(H) x 20°(V)
	SR-117: 13 mm lens – FOV: 17°(H) x 14°(V)
	SR-112: 19 mm lens – FOV: 12°(H) x 10°(V)
320 x 240 pixels	SR-348: 9 mm lens – FOV: 48°(H) x 39°(V)
	SR-334: 13 mm lens – FOV: 34°(H) x 28°(V)
	SR-324: 19 mm lens – FOV: 24°(H) x 19°(V)
	SR-313: 35 mm lens – FOV: 13°(H) x 10°(V)
	SR-309: 50 mm lens – FOV: 9°(H) x 7°(V)
	SR-304: 100 mm lens – FOV: 4.6°(H) x 3.7°(V)



Thermal image



Thermal image



Thermal image



Normal vision

Thermal image



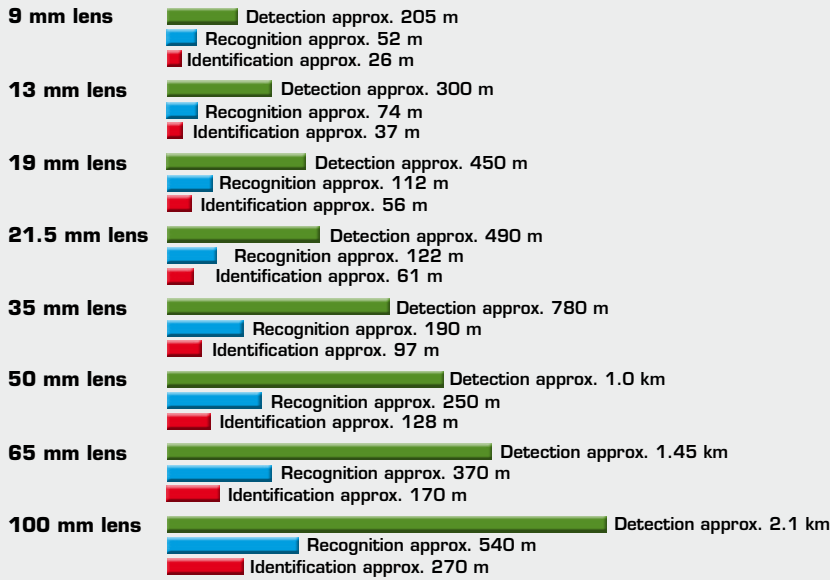
Thermal image

RANGE PERFORMANCES

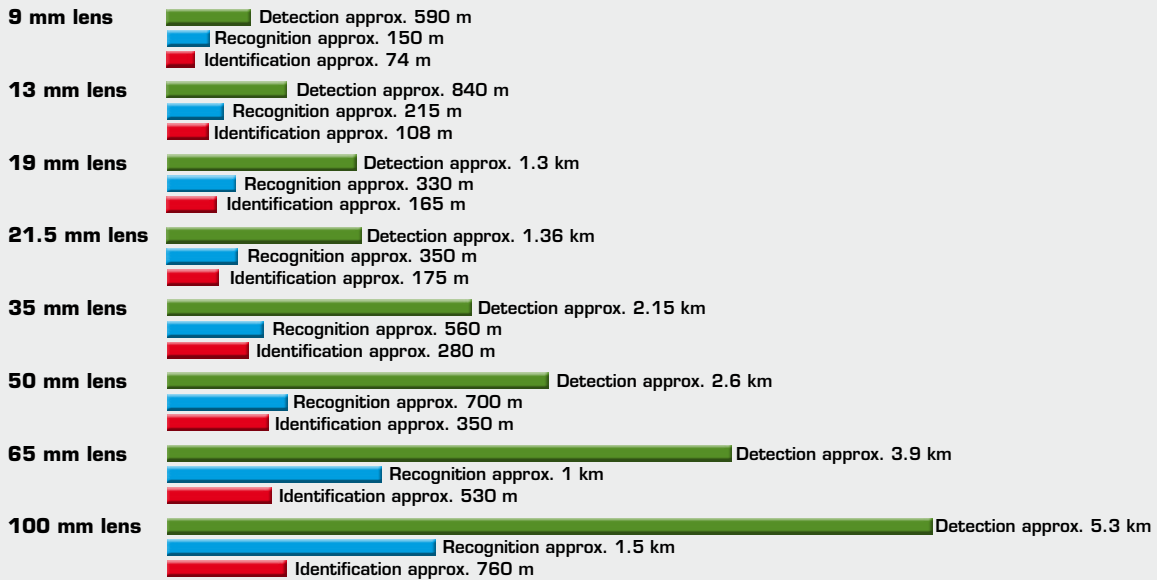
Range performances for SR-, F-, PT-, and outdoor D-Series



Detection, Recognition, Identification of Human Target



Detection, Recognition, Identification of Vehicle with 2.3m critical dimension



Actual range may vary depending on camera set-up, environmental conditions, user experience and type of monitor or display used.

Assumptions:

50 % probability of achieving objective at specified distance given 2°C temperature difference and 0.85 / km atmospheric attenuation factor.

SR-SERIES

Technical specifications

SR-Series: general specifications

IMAGING PERFORMANCE	
Detector type	Focal Plane Array (FPA), uncooled Vanadium Oxide microbolometer
Spectral range	7.5 to 13µm
Thermal sensitivity	85 mK at 25°C
Image frequency	25 Hz or 8.3 Hz
Focus	Focus free, athermal lens
Image processing	Automatic Gain Control (AGC), Digital Detail Enhancement (DDE)
SYSTEM FEATURES	
Automatic heater	Clears ice from windows
IMAGE PRESENTATION	
Video output	NTSC or PAL composite video
Connector types	BNC (1) provides video output
POWER	
Requirements	14-32 V DC or 18-27 V AC
Consumption	Nominal: 3 W at 24 V DC 5 W at 24 V AC Peak: 24 W at 24 V DC 33 W at 24 V AC

ENVIRONMENTAL SPECIFICATION	
Operating temperature range	-40°C to +55°C
Storage temperature range	-50°C to +85°C
Encapsulation	IP66
Shock	IEC 60068-2-27
Vibration	Mil-Std-810F
PHYSICAL CHARACTERISTICS	
Camera Weight	2.2 kg - SR-304: 3.6 kg
Camera Size (L x W x H)	267 mm x 127 mm x 145 mm
SR-304: Camera Size (L x W x H)	361 mm x 127 mm x 145 mm
Shipping weight (camera + packaging)	5.3 kg
Shipping size (camera + packaging) (L x W x H)	496 mm x 343 mm x 331 mm
INTERFACES	
RS-422	Yes
RS-232	Yes
STANDARD PACKAGE	
Thermal imaging camera, operator manual	

SR-Series: version specific specifications

SENSOR RESOLUTION	160 X 120	320 X 240
Name/Focal length/ Field of view	<u>SR-124:</u> 9 mm lens – FOV: 24°(H) x 20°(V) <u>SR-117:</u> 13 mm lens – FOV: 17°(H) x 14°(V) <u>SR-112:</u> 19 mm lens – FOV: 12°(H) x 10°(V)	<u>SR-348:</u> 9 mm lens - FOV: 48°(H) x 39°(V) <u>SR-334:</u> 13 mm lens - FOV: 34°(H) x 28°(V) <u>SR-324:</u> 19 mm lens - FOV: 24°(H) x 19°(V) <u>SR-313:</u> 35 mm lens - FOV: 13°(H) x 10°(V) <u>SR-309:</u> 50 mm lens - FOV: 9°(H) x 7°(V) <u>SR-304:</u> 100 mm lens - FOV: 4.6°(H) x 3.7°(V)
Electronic zoom	2x	2x and 4x



Specifications are subject to change without notice.
 Sizes and weights are indicative.

ACCESSORIES

PT-Series



PT-Series wall mount

Can be used to mount a PT-Series network-ready Multi-Sensor against a wall.



PT-Series pole mount adapter

Adapts the PT-Series wall mount for installation on a pole.



PT-Series adapter plate

Can be used to mount a PT-Series network-ready Multi-Sensor to a wide variety of existing mounts.



PT-Series pedestal mount

Mount to install a PT-Series network-ready Multi-Sensor. Typically used on a flat horizontal surface such as a wall or the top of a pole.



PT-Series power supply

Power supply to power a PT-Series network-ready thermal imaging camera.



Hard transport case for PT-Series thermal imaging camera

Rugged, watertight plastic shipping case. Holds all items securely. The case can be locked with padlocks and features a breather valve to prevent pressure build-up in airplane cargo holds.



Nexus Console Joystick

Joystick to control the PT-Series

SR/PTZ-35x140MS



Wheeled shipping case for the SR/PTZ-35x140MS (and breakout cable)

Rugged, watertight plastic shipping case. Holds all items securely. The case can be locked with padlocks and features a breather valve to prevent pressure build-up in airplane cargo holds.



Wheeled shipping case for the SR/PTZ-35x140MS accessories (40' cable, power supply, laptop, etc)

Rugged, watertight plastic shipping case. Holds all items securely. The case can be locked with padlocks and features a breather valve to prevent pressure build-up in airplane cargo holds.



Cable (extension)

40" extension cable to connect the PTZ/SR-35x140 MS to the break-out box.



24VAC Power Supply

Power supply for the PTZ/SR-35x140 MS.



Nexus Console Joystick

Joystick to control the PTZ-35x140 MS.