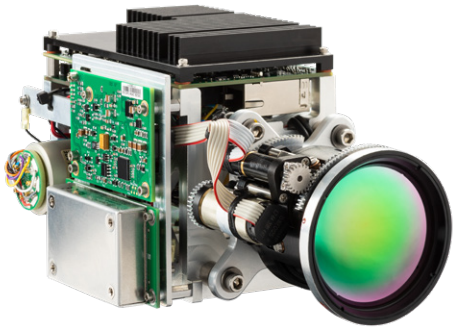
TELOPS
Innovative Infrared Imaging.

CAMERA MODULES

EASILY INTERFACED. EASILY INTEGRATED.

Light, robust, and easy to operate, the new modular line from Telops is specifically designed to be integrated into complex optical systems.

Available in MW or LW, this line of products allows you to get highly constrasted images for a large variety of applications, such as process control, monitoring, and surveillance. Get sharp, crisp images without the hassle.



The R-100MC interior.

KEY BENEFITS

HIGH-SPEED DATA

High-performance electronics provide full frame thermal images up to 200 Hz.

ADVANCED IMAGE PROCESSING

The camera modules provide customizable automatic gain control adjustment, video detail enhancement, and auto-adaptive dynamic range filters to adjust to any type of mission.

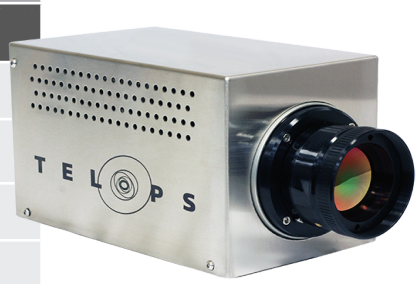
HARDWARE MODULARITY

The camera modules have the capability to adjust to any type of system, and can thus communicate with a large selection of motorized optical systems. On request, Telops may also propose alternative IR detector options.

EXAMPLE OF A TYPICAL USE

Surveillance of urban areas

THE R100 LINE.		
	R100 M	R100 L
DETECTOR TYPE	MCT	MCT
SPECTRAL RANGE	3.7 µm to 4.8 µm (1.5 µm to 5 µm F/3 optional)	7.7 µm to 9.3 µm
SPATIAL RESOLUTION	640 x 512 pixels	640 x 512 pixels
DETECTOR PITCH	15 µm	15 µm
APERTURE SIZE	F/2 or F/4	F/2
FRAME RATE	Tunable, max 115 Hz	Tunable, max 230 Hz
TYPICAL NETD	< 25 mK	< 25 mK
COOLER MTBF	10 000 hrs	10 000 hrs
WEIGHT	1.4 kg	1.4 kg



The R100.

INCLUDES
Camera control: RS232/422
Video output: PAL/NTSC (HDMI av. upon request)
Trigger In/Out LVTTL
Real-time processing (BPR-NUC)
Manual/Auto Gain & Offset Control
Real-time adjustable video enhancement
Palette and symbology management
Third-party lens control interface connector: RS232/422

ENVIRONMENT
Power: 18 to 32 VDC, < 24 W steady state
Operational: -32 to +65 °C
Storage: -40 to +70 °C
Shocks: transport and operational, 30 g, 11 ms ½ sinus
Vibrations: transport and operational, 2.1 g RMS 10-500 Hz

DELIVERABLES
Command Line Control and Windows Software
Optical head
Electronic User Guide, Quick-Start Guide, and ICD (ENG)

OPTIONS
24 VDC Power Supply
Tool Cable: Power, Serial Control, PAL/NTSC video (Consult Telops for HDMI), and Trigger In/Out
CamLink interface board for control and 14 bits digital data
Camera Link™ frame grabber board
GigE interface board for control and 14 bits digital data
Mechanical interface for external lens (threaded or bayonet)
3-m GigE cable
3-m Camera Link™ cable
Reusable rugged transport case

Specifications are subject to change without notice. Other configurations are available upon request.

THE R100 MC LINE.	
	R100 MC
DETECTOR TYPE	MCT
SPECTRAL RANGE (50 % FWHM)	3.7 µm to 4.8 µm
SPATIAL RESOLUTION	640 x 512 pixels
DETECTOR PITCH	15 µm
ZOOM TYPE	Continuous
NFOV	2° x 1.6°
WFOV	29.8° x 24.1°
APERTURE SIZE	F/5.5
FRAME RATE	Tunable, max 60 Hz
TYPICAL NETD	< 25 mK
COOLER MTBF	10 000 hrs
WEIGHT	1.4 kg

The R100 MC enclosure.

The R100 MC interior.

DELIVERABLES
Command & Control S/W
Optical head
Documentation and ICD

ENVIRONMENT
Operational: -30 to +55 °C

INCLUDES
Real-time data output: RAW, NUC
Camera control: Camera Link™, RS422
Video output: PAL/NTSC, Camera Link™
Trigger In/Out
Real-time processing
18-32VDC
15 W @ 18 V

WFOV.

NFOV.

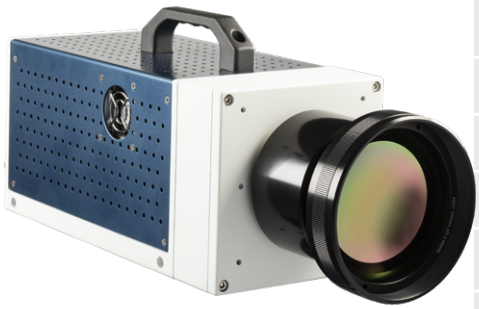
Also available! Imaging Kits.

Telops also offers imaging kits which allow customers to customize their own camera or imaging systems. These kits include the full set of electronic boards and give access to the most advanced camera features. As the board set configuration highly depends on each application and specific request, please ask Telops for a quote.

INCLUDES
Real-time data output: RAW, NUC, temperature
Camera control: GigE, Camera Link™, RS232 (command line only)
Data transfer: GigE (frame rate limitations may apply), Camera Link™
Digital video output: HD-SDI
Customer calibration management tools
Advanced triggering functionalities
Real-time processing (RTP-NUC)
Telops Automatice Exposure Control (AEC)

DELIVERABLES
Board Set Assembly
Documentation and ICD

Specifications are subject to change without notice.



THE R200 LINE.		
	R200 M	R200 L
DETECTOR TYPE	MCT	MCT
SPECTRAL RANGE	3.7 µm to 4.8 µm (1.5 µm to 5 µm F/3 optional)	7.7 µm to 9.3 µm
SPATIAL RESOLUTION	640 x 512 pixels	640 x 512 pixels
DETECTOR PITCH	15 µm	15 µm
APERTURE SIZE	F/2 or F/4	F/2
FRAME RATE	Tunable, max 210 Hz	Tunable, max 230 Hz
TYPICAL NETD	< 25 mK	< 25 mK
COOLER MTBF	10 000 hrs	10 000 hrs
WEIGHT W/O ENCLOSURE	4 kg	4 kg
LENS MOUNT	Bayonet	Threaded

INCLUDES
Real-time data output: RAW, NUC, temperature
Camera control: GigE, Camera Link™, RS232 (command line only)
Data transfer: GigE (frame rate limitations may apply), Camera Link™
Digital video output: HD-SDI
Customer calibration management tools
Advanced triggering functionalities
Real-time processing (RTP-NUC)
Telops Automatice Exposure Control (AEC)

DELIVERABLES
Control and Command Reveal IR S/W
Optical head
Documentation and ICD

OPTIONS
24 VDC Power Supply
Camera Link™ frame grabber board
3-m Camera Link™ cable
Motorized filter wheel (4-position), user-removable 25.4-mm diameter filters, up to 2-mm maximum thickness

Please note that the R200 comes without a lens.

Specifications are subject to change without notice. Other configurations are available upon request.

FOR MORE INFORMATION | TELOPS.COM

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