

# FLIR SC7700-ML

State-of-the-art Infrared Systems For R&D And Thermography Applications

## Technical Specifications

Feature List For SC7700-ML	MWIR	LWIR
Sensor type	MCT	QWIP
Waveband	3.7 - 4.8 $\mu\text{m}$	7.7 - 9.1 $\mu\text{m}$
Pixel Resolution	640 x 512	640 x 512
Pitch	15 $\mu\text{m}$	20 $\mu\text{m}$
Aperture	F/2	F/2.2
Cooler	Close-cycle (rotary) stirling cooler	
Sub array windowing	User defined size arbitrary location	
Frame rate	115 Hz	120 Hz
Integration time	1 $\mu\text{s}$ to 20 ms programmable (100ns step) ITR	

Optical Specifications	
Optical interface	M80 Thread Optional Janos Interface Optional Motorized Interface

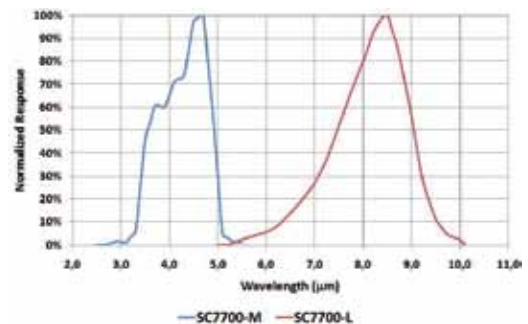
Measurement	
Temperature calibration range	-20 °C to 1500 °C in single ranges or in extended mode
Temperature measurement accuracy	$\pm 1^\circ\text{C}$ or $\pm 1\%$
NETD	<25 mK (20 mK typical)
Filter wheel	4 slots for 2x1" filter 1 mm thick
CNUC™ and Hypercal™	Yes

Timing & Signals	
Analogue video	PAL or NTSC, S-Video & composite
Digital video	CAMLINK / GigE
Trigger input / output	LVTTL (3.3V) Signal Programmable Delay & Active level Ultra low Jitter
Trigger jitter	< 200 ns
Analogue signal inputs	1 x (-5 to 5V) + 2 x (0 to 10 V)

Physical Specifications	
Size (with 27 mm lens) (LxWxH)	253x130x168 mm
Weight (with 27 mm lens)	4.950 Kgs
Operational temperature	-20 °C / +55 °C
Shock	Operational 25G, IEC 68-2-29
Vibration	Operational 2G, IEC 68-2-26
Input voltage	12 VDC
Power consumption (cooldown / stab)	30 W / 25 W

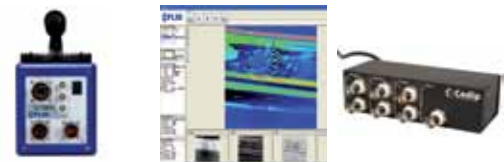
Optional Lenses	MWIR	LWIR
12 mm*	44° x 36°	
25 mm*	22° x 17°	
50 mm*	11° x 8.8°	15° x 12°
100 mm* (LW only)	5.5° x 4.4°	7.3° x 5.8°
200 mm	2.7° x 2.2°	
Microscope lens X1*	9.6 x 7.2 mm	
Microscope lens X3*	3.2 x 2.4 mm	
Lens Extenders		
Janos lenses compatibility		

\* Motorized Lens Interface Compatible



Typical Camera Spectral Sensitivity

## Accessories



Optional Industrial Grade Connectors & Cables

Thesa software - Lockin / Stress Analysis

USB record triggering rack

### Also available :

- Altair radiometric software
- Software development Kit (C++ / Labview)
- Factory Temperature Calibration
- Spectral filters
- Battery pack for up to 4 hours autonomy
- Industrial Grade Connectors & Cables
- Motorized Lens Interface with Autofocus