

## P/N: 66802-0202

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### Document identity

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### Website

<http://www.flir.com>

### Customer support

<http://support.flir.com>

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Detector/image	
Detector type	Digital focal plane array (FPA)
Sensor material	InSb
IR resolution	640 × 512
Detector pitch	15 μm
f-number	f/3
Optical interface	M80 thread
Lens identification	N/A
Windowing	320 × 256/160 × 128
Arbitrary size windowing (down to)	2 × 2
Arbitrary size windowing (steps)	Horizontal: ≥2, steps of 2 pixels Vertical: ≥2, steps of 2 pixels
Maximum image frequency (full frame)	355 Hz
Maximum image frequency	4500 Hz
Maximum frame rate <sup>1</sup>	<ul style="list-style-type: none"> <li>• 355 Hz @ 640 × 512 IWR</li> <li>• 670 Hz @ 320 × 256 IWR</li> <li>• 1205 Hz @ 160 × 128 IWR</li> <li>• 4500 Hz @ 320 × 8 IWR</li> </ul>
Integration time range	500 ns–20 000 μs
Integration time step	12.5 ns
Integration time mode	IWR/ITR
Digital output	GigE/Camlink base—medium
Cooler type	Closed-cycle (rotary) Stirling cooler
Cooling temperature	77 K
Operability	>99.5%

1. Some cameras also have a minimum frame rate, unspecified. Contact your FLIR representative for more information.



# FLIR X6580sc M80

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<b>Physical data</b>	
Size (L x W x H)	<ul style="list-style-type: none"> <li>233 mm x 150 mm x 178 mm (9.17" x 5.91" x 7.01") (without LCD)</li> <li>233 mm x 150 mm x 178 mm (9.17" x 5.91" x 8.71") (with LCD)</li> </ul>
Weight without lens	4.350 kg (9.590 lb.) without LCD 4.800 kg (10.580 lb.) with LCD
Tripod mounting	UNC ¼"-20
<b>Power system</b>	
Power supply	24 V DC
Power consumption (cooldown/stab)	48 W/35 W
<b>Environmental data</b>	
Operating temperature range	-20°C/+50°C (-4°F/122°F)
Shock	Operational 25g, IEC 68-2-29
Vibration	Operational 2g, IEC 68-2-26
Encapsulation	IP 54 (IEC 60529)
<b>Radiometry/measurement</b>	
Spectral range	1.5–5.5 µm
Thermal sensitivity/NETD	<25 mK (20 mK typical)
CNUCTM/HypercalTM	Yes
CLUT/extended linear response	Yes
Temperature measurement accuracy	±1°C (1.8°F) or ±1%
Maximum temperature without filter	300°C (572°F)
Well capacity (e-)	5.8 Me-
Filter wheel	4 slots for 1" filter up to 2.5 mm thick
Filter holding	Screw-in holder
<b>Timings and signals</b>	
SYNC IN	TTL, singled ended, BNC >300 ns pulse width
SYNC IN jitter	12.5 ns
SYNC IN active edge	Falling or rising edge
Delay between SYNC IN and integration	
Delay between SYNC IN and top frame	
Analog signals	1 x (0/+10 V), BNC
TRIGGER IN	TTL, singled ended, BNC >300 ns pulse width
Video output	DVI 1080p30
Waveform generator	Sinus/triangle/square TTL 0–5 V Frequency: 0.001 Hz to 250 kHz
<b>Ethernet</b>	
GigE Vision	Yes
<b>Camera link</b>	
Connector type	2 x Mini MDR26
Tap number	2 (A/B/C/D)
Bit depth	16 bpp



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<b>Radio</b>	
Wi-Fi	802.11g
	Frequency range: 2412–2462 MHz
	Maximum output power: 15 dBm
Antenna	Internal

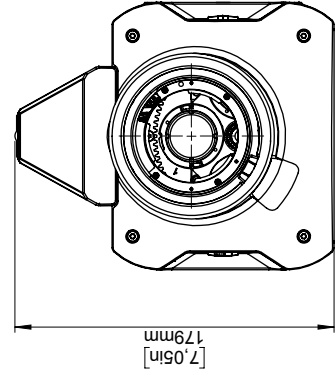
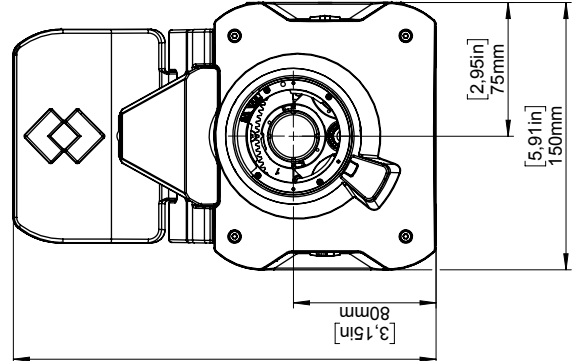
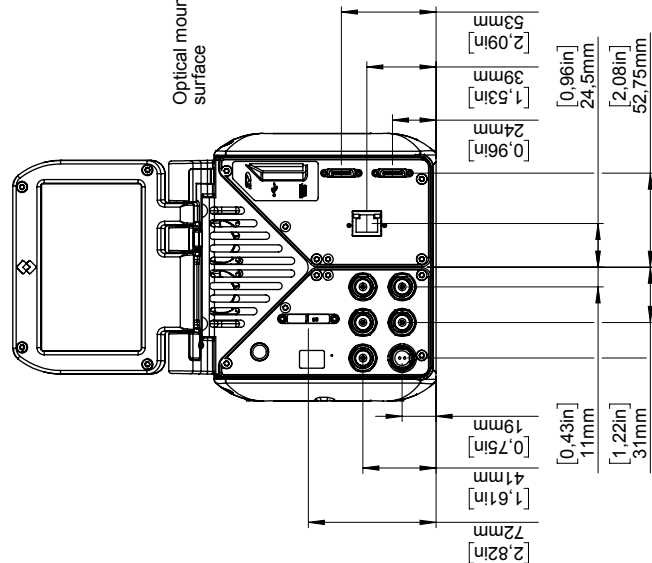
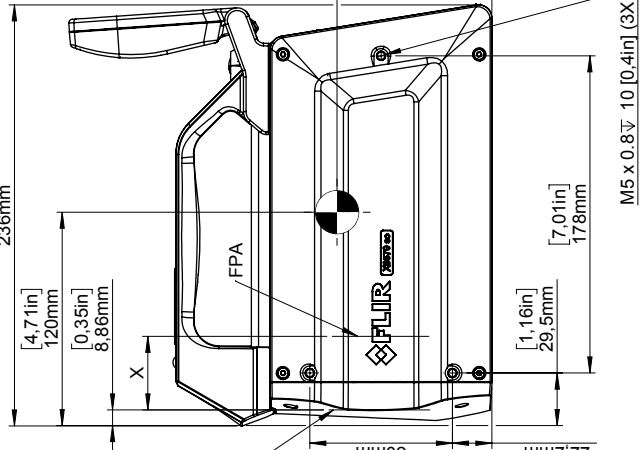
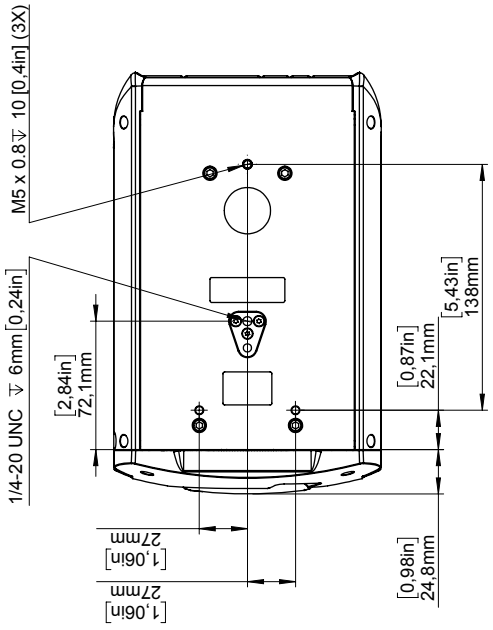
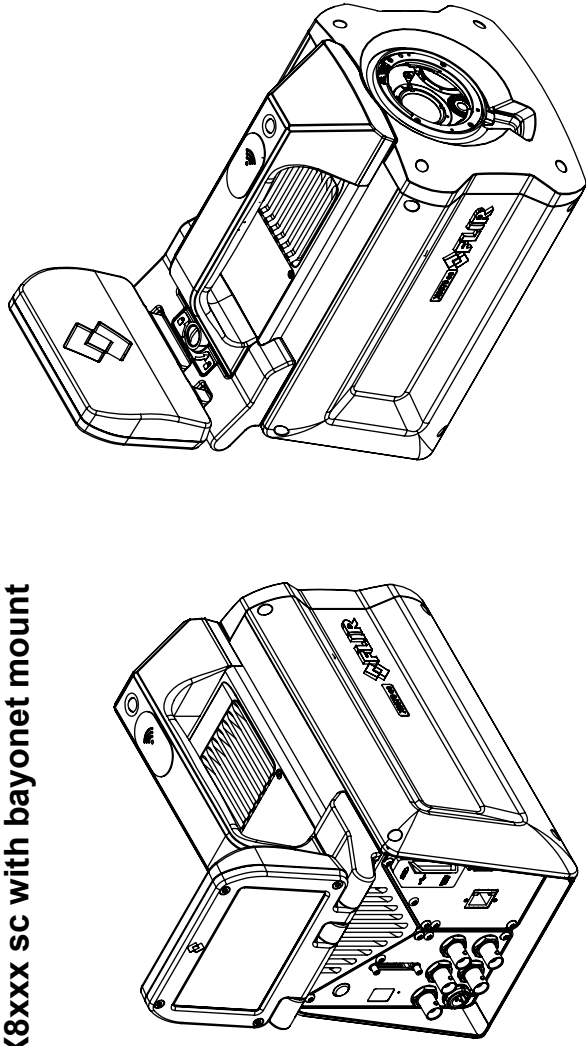
<b>Shipping information</b>	
Packaging, type	
Packaging, weight	
Packaging, size	
EAN-13	7332558008126
UPC-12	845188008475
Country of origin	Sweden

<b>Lenses</b>	
Available optic 1	L0315 12 mm f/2
Available optic 2	L0116 25 mm f/2
Available optic 3	L0106 50 mm f/2
Available optic 4	L0118 100 mm f/2
Available optic 5	L0804 200 mm f/2
Available optic 6	L0120 Close up x1 f/2
Available optic 7	L0120E Close up x3 f/2
Available optic 8	L0905 Close up x1 wd 30cm
Available optic 9	L0709T 27 mm BB f/3
Available optic 10	L0608T 50 mm BB f/3
Available optic 11	L0604T 100 mm BB f/3
Available optic 12	L0701 200 mm BB f/3
Available optic 13	

### Supplies & accessories:

- T198970; Lens MW 1x f/3.0 WD30
- T128379ACC; FLIR Platinum SDK

# X6/X8xxx sc with bayonet mount



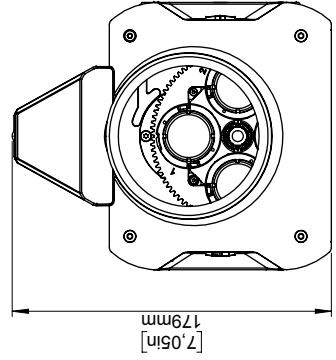
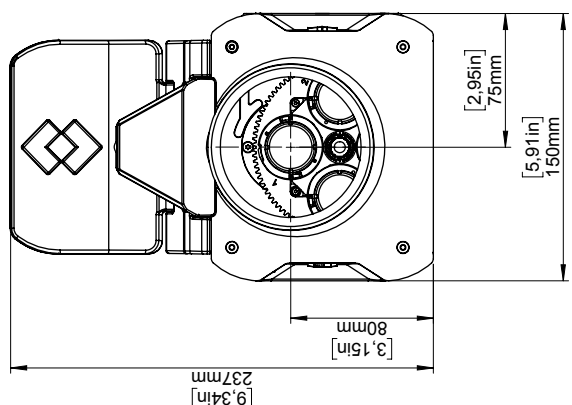
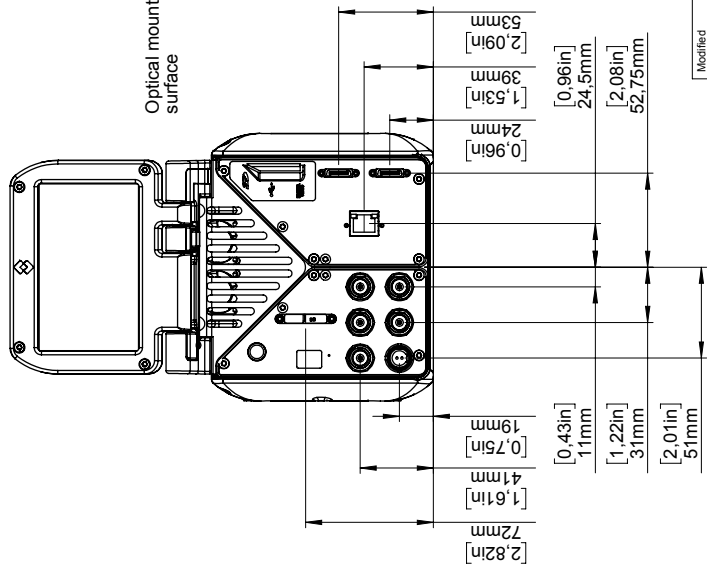
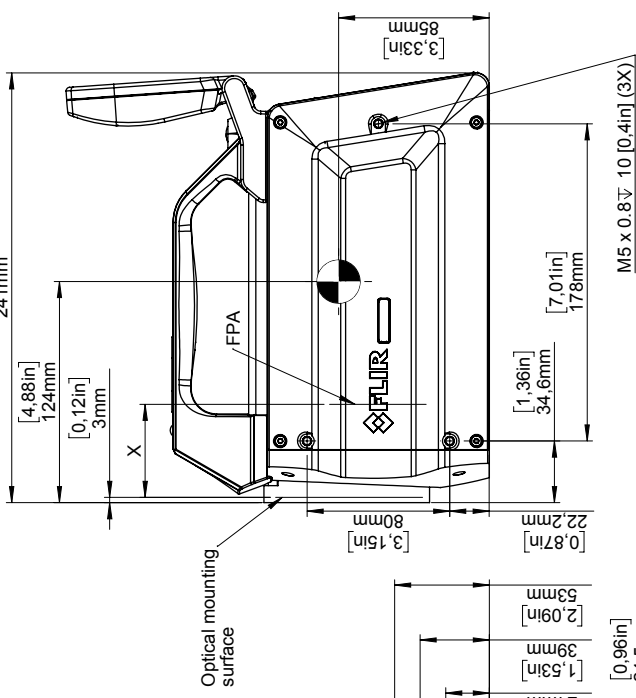
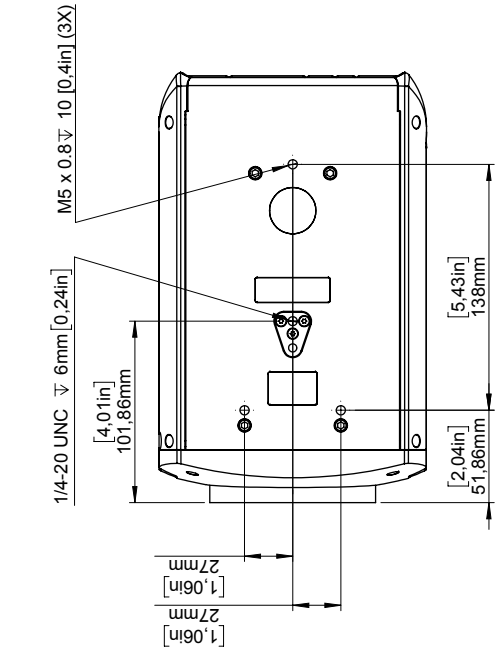
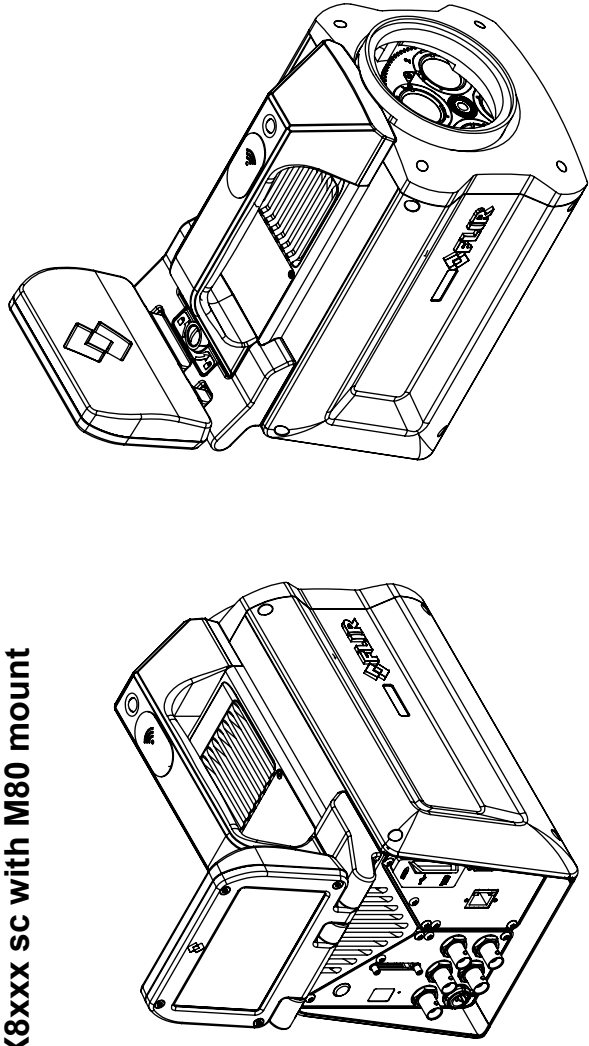
With display removed

Model name	X	Weight
X6520sc	41.28 mm [1,625 in]	4800 g $\pm$ 5 %
X6530sc	41.28 mm [1,625 in]	4800 g $\pm$ 5 %
X6540sc	41.28 mm [1,625 in]	4800 g $\pm$ 5 %
X6550sc	41.28 mm [1,625 in]	4800 g $\pm$ 5 %
X6580sc	41.28 mm [1,625 in]	4800 g $\pm$ 5 %
X8400sc	47.90 mm [1,886 in]	5100 g $\pm$ 5 %

Modified: 2017-02-07
   
 Check: FRGU
   
 Drawn by: R&D Instruments
   
 Denomination: X6/X8xxx - Basic dimension
   
 Size: A3
   
 Scale: 1:3
   
 Drawing No.: T130229
   
 Sheet: 1(2)
   
 Rev: A

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# X6/X8xxx sc with M80 mount



With display removed

Model name	X	Weight
X6520sc	52.24 mm [2.057 in]	4850 g ± 5 %
X6530sc	52.24 mm [2.057 in]	4850 g ± 5 %
X6540sc	52.24 mm [2.057 in]	4850 g ± 5 %
X6550sc	52.24 mm [2.057 in]	4850 g ± 5 %
X6570sc	52.24 mm [2.057 in]	5000 g ± 5 %
X6580sc	52.24 mm [2.057 in]	4850 g ± 5 %
X8400sc	58.86 mm [2.317 in]	5100 g ± 5 %

**FLIR**  
 Modified: 2017-02-07  
 Check: FRGU  
 Drawn by: R&D Instruments  
 Size: A3  
 Scale: 1:3  
 Drawing No: T130229  
 Rev: A  
**X6/X8xxx - Basic dimension**

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