

P/N: 66801-0101

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Document identity

Publ. No.: 66801-0101

Release:

Commit: 43497

Language: en-US

Modified: 2017-06-26

Formatted: 2017-09-14

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	USL bayonet
Lens identification	Automatic
Windowing	320 × 256/160 × 128
Arbitrary size windowing (down to)	64 × 8
Arbitrary size windowing (steps)	Horizontal: ≥64, steps of 2 pixels Vertical: ≥8, steps of 4 pixels
Maximum image frequency (full frame)	355 Hz ¹
Maximum image frequency	4700 Hz ¹
Maximum frame rate ²	<ul style="list-style-type: none"> • 355 Hz @ 640 × 512¹ • 670 Hz @ 320 × 256¹ • 1205 Hz @ 160 × 128¹ • 4700 Hz @ 64 × 8¹
Integration time range	500 ns–20 000 μs ³
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. Frame rates are achieved with Camlink Medium mode, ITR integration mode, 500 ns integration time.
2. Some cameras also have a minimum frame rate, unspecified. Contact your FLIR representative for more information.
3. These values are camera min./max. values, which may be higher and/or lower than the advisable integration time range.



FLIR X6580sc

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Physical data	
Size (L x W x H)	<ul style="list-style-type: none">• 233 mm x 150 mm x 178 mm (9.17" x 5.91" x 7.01") (without LCD)• 233 mm x 150 mm x 178 mm (9.17" x 5.91" x 8.71") (with LCD)
Weight without lens	<ul style="list-style-type: none">• 4.350 kg (9.590 lb.) without LCD• 4.800 kg (10.580 lb.) with LCD
Tripod mounting	UNC ¼"-20
Power system	
Power supply	24 V DC
Power consumption (cooldown/stab)	48 W/35 W
Environmental data	
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)
Radiometry/measurement	
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
Timings and signals	
SYNC IN	TTL, singled ended, BNC >300 ns pulse width
SYNC IN jitter	12.5 ns
SYNC IN active edge	Falling or rising edge
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
Ethernet	
GigE Vision	Yes
Camera link	
Connector type	2 x Mini MDR26
Tap number	2 (A/B/C/D)
Bit depth	16 bpp



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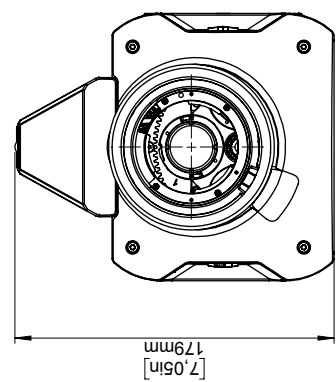
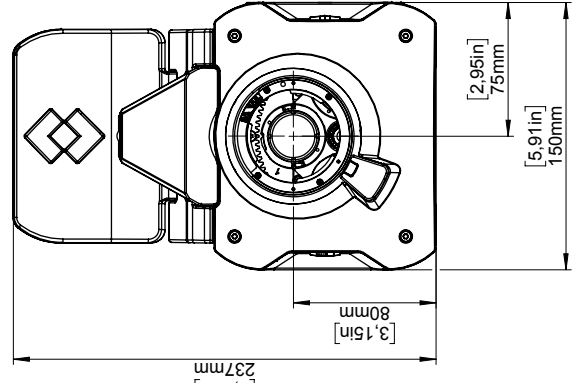
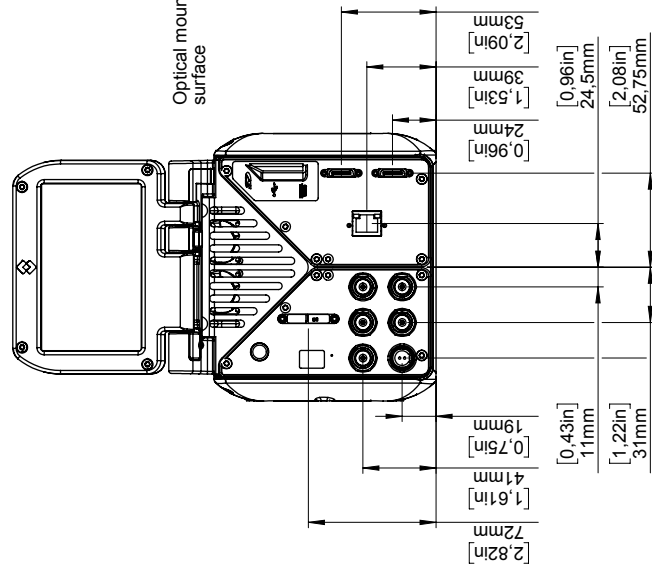
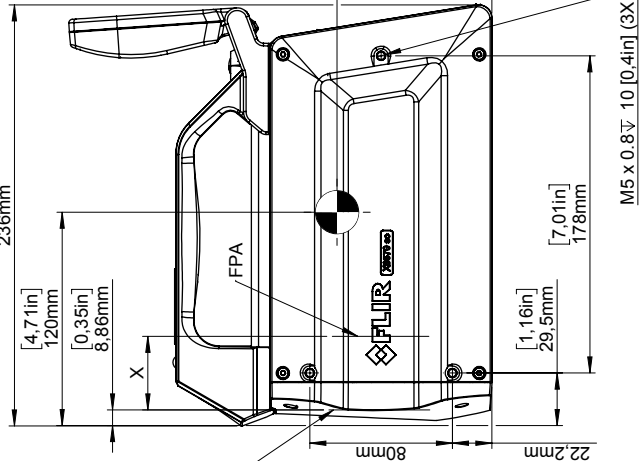
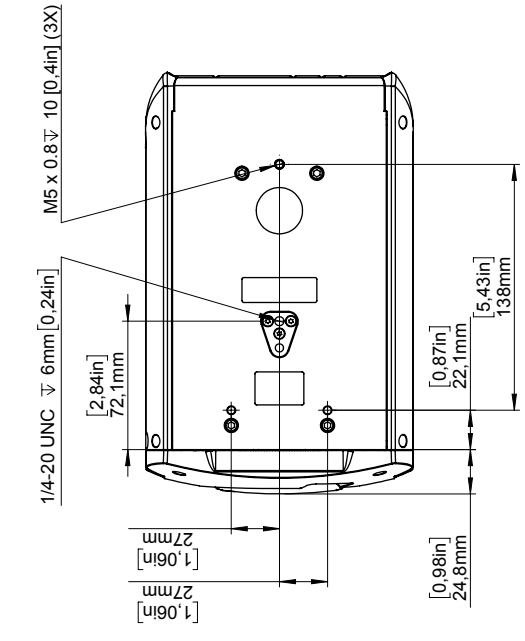
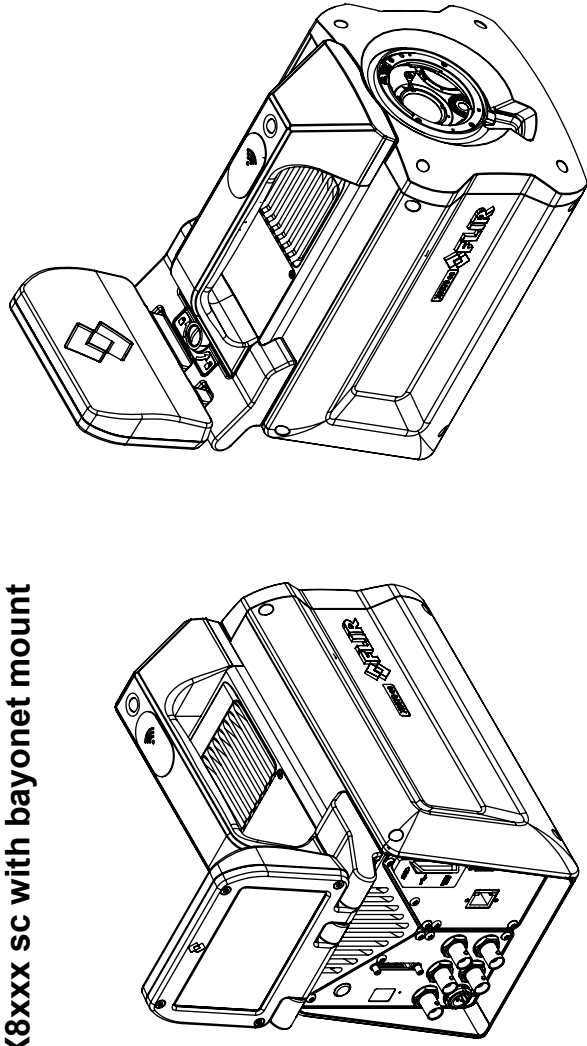
Radio	
Wi-Fi ⁴	802.11g
	Frequency range: 2412–2462 MHz
	Maximum output power: 15 dBm
Antenna	Internal
Shipping information	
Packaging, type	
Packaging, weight	
Packaging, size	
EAN-13	7332558008119
UPC-12	845188008468
Country of origin	Sweden
Lenses	
Available optics	<ul style="list-style-type: none">• L1009 MW 25 2.0 640 × 512• L1008 MW 50 2.0 640 × 512• L1019 MW 100 2.0 640 × 512• L1118 MW 200 2.0 640 × 512• L1114 MW Close up x3• L1209 MW Close up x5• L1202 MW Close up x1 wd 30cm

Supplies & accessories:

- T199084; Lens BB 100mm F/3 Bayonet (L1207)
- T199057; Lens BB 200mm F/3 Bayonet (L1208)
- T199080; Lens BB 27mm F/3 Bayonet (L1205)
- T199082; Lens BB 50mm F/3 Bayonet (L1206)
- T198970; Lens MW 1x f/3.0 WD30
- T128379ACC; FLIR Platinum SDK

4. May be disabled at time of purchase.

X6/X8xxx sc with bayonet mount



With display removed

Model name	X	Weight
X6520sc	41.28 mm [1.625 in]	4800 g ± 5 %
X6530sc	41.28 mm [1.625 in]	4800 g ± 5 %
X6540sc	41.28 mm [1.625 in]	4800 g ± 5 %
X6550sc	41.28 mm [1.625 in]	4800 g ± 5 %
X6580sc	41.28 mm [1.625 in]	4800 g ± 5 %
X8400sc	47.90 mm [1.886 in]	5100 g ± 5 %

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Size: A3
 Scale: 1:3
 Drawing No: T130229

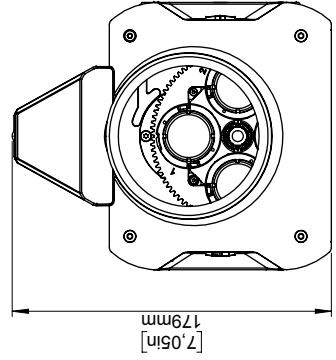
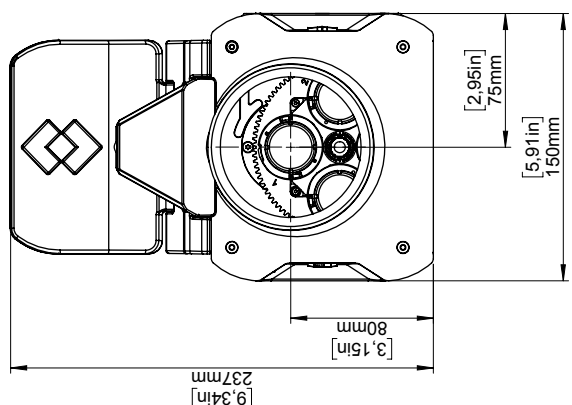
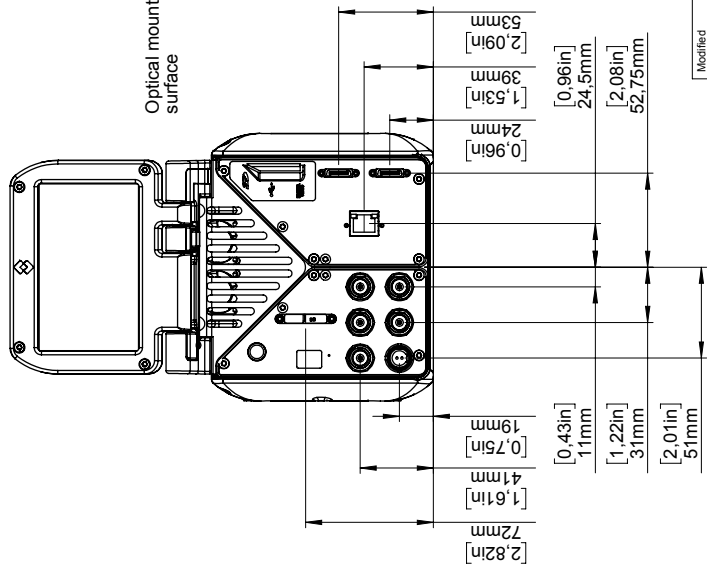
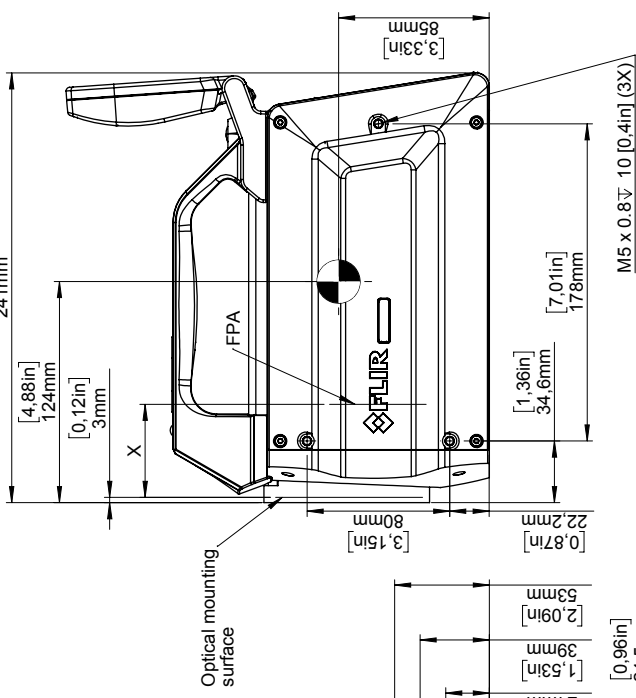
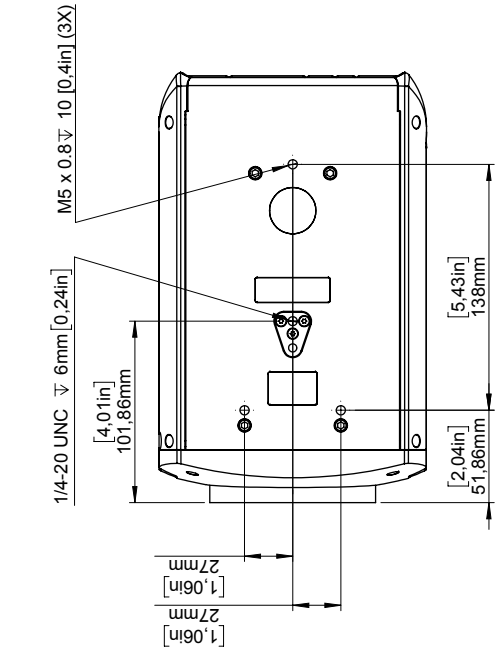
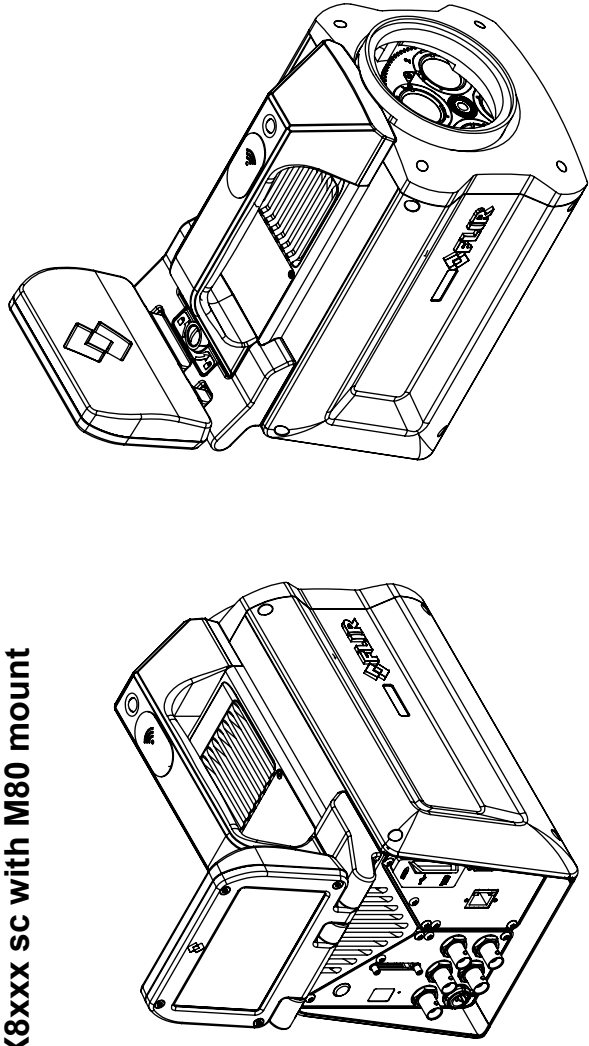
Modified: 2017-02-07
 Denomination: X6/X8xxx - Basic dimension

Check: FRGU
 Drawn by: R&D Instruments

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 %

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

X6/X8xxx - Basic dimension

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