Canon
SEE IMPOSSIBLE

CANON COLOR LOW LIGHT CAMERAS

The Canon ME20F-SH Multi-Purpose Camera features a high-sensitivity 35mm full-frame sensor with 19μm pixel size, allowing it to achieve outstanding image fidelity in low light conditions while still providing accurate color reproduction. The CMOS sensor is capable of reaching an ISO in excess of 4,500,000 making it ideal for a wide variety of applications.

ME20F-SH

Base model with outstanding color low-light capabilities.

ME20F-SH
IR Bandpass

This camera is equipped with two IR bandpass filters (850nm and 950nm) for use in specialty applications.

ME20F-SH
Monochrome

The RGB Bayer filter array has been removed, providing up to 6,000,000 ISO in black and white.

ME20F-SHN

This camera is equipped with an Ethernet port that can be used to remotely control the camera and access its video output over IP.
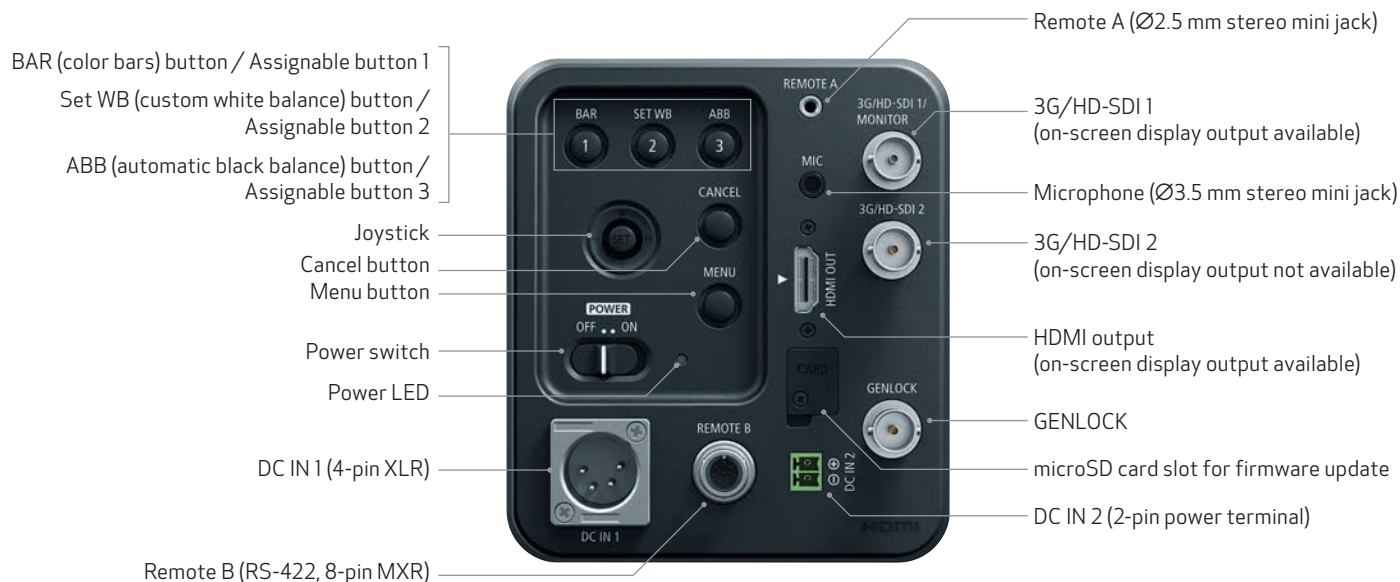
SPECIFICATIONS

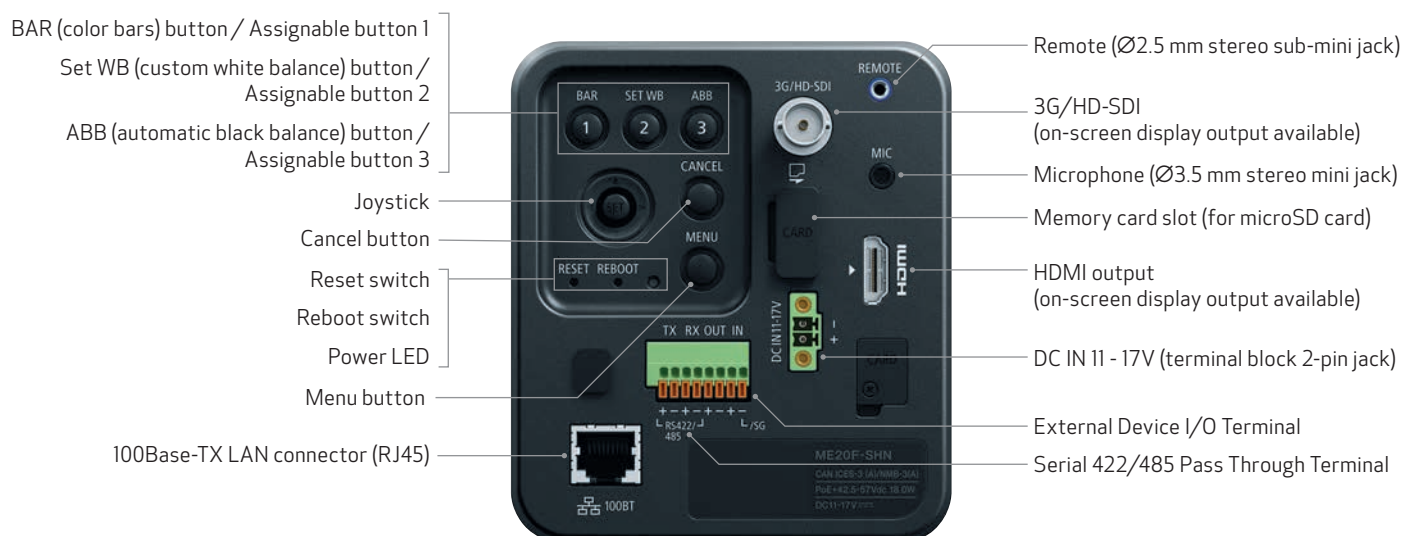|	ME20F-SH	ME20F-SH IR Bandpass	ME20F-SH Monochrome	ME20F-SHN
Image Sensor				
Sensor	35mm Full Frame CMOS			
Total Pixels	Approx. 2.59M (2160 x 1200)			
Effective Pixels	Approx. 2.26M (2000 x 1128)			
Resolution	1920 x 1080, 1280 x 720			
Pixel Size	19μm x 19μm			
Min. Sub. Illumination	0.0005 lux or less (at 75dB, F1.2, 29.97P, 50IRE)		TBD	0.0005 lux or less (at 75dB, F1.2, 29.97P, 50IRE)
Color Filter Array	RGB Primary Color Filter Bayer Array		N/A	RGB Primary Color Filter Bayer Array
Lens System				
Canon EF Lenses	Select EF, EF-S and Cinema EF Lenses, Select 2/3" BCTV Lenses with adapter accessory			
Terminals				
Microphone	3.5mm stero mini jack (plug-in power mic supported)			
Remote Control	Remote A: 2.5mm stereo mini jack RS-232 (Canon OK Protocol) Remote B: Circular 8-pin RS-422 (Canon OK-R Protocol)			Remote A: 2.5mm stereo mini jack RS-232 (Canon OK Protocol) Ethernet (Canon Webview Protocol)
External Device I/O Terminal Block	N/A			Input x 1, Output x 1, RS-422/RS-485 x 1 (Pass-through only)
Genlock	Black burst or Tri-level reference			N/A
3G/HD-SDI	Terminal 1 (On screen display optional), Terminal 2 (Clean out only) 3G-SDI: SMPTE 424, SMPTE 425, SMPTE ST 299-2, HD-SDI: SMPTE 292, SMPTE 296, SMPTE ST 299-1 Resolution: 1080P/1080i/720P Frame Rates: 1920 x 1080: 59.94P/59.94i/50P/50i/29.97P/25P/23.98P, 1280 x 720: 59.94P/50P/29.97P/25P/23.98P			Terminal 1 (On screen display optional) 3G-SDI: SMPTE 424, SMPTE 425, SMPTE ST 299-2, HD-SDI: SMPTE 292, SMPTE ST 299-1 Resolution: 1080P/1080i/720P Frame Rates: 1920 x 1080: 59.94P/59.94i/50P/50i/29.97P/25P/23.98P, 1280 x 720: 59.94P/50P/29.97P/25P/23.98P
HDMI	Terminal 1 (On screen display optional) Resolution: 1080P/1080i/720P/576P[1]/480P[1] Frame Rates: 1920 x 1080: 59.94P/59.94i/50P/50i/29.97P/25P/23.98P, 1280 x 720: 59.94P/50P [1] 480P/576P video signal is output only when a monitor that supports only 480P/576P is connected to the camera			
Ethernet	N/A			LAN x 1 (RJ45, 100Base-TX (auto/full duplex/half-duplex)) MJPEG, MPEG4-AVC/H.264 Streaming Camera Controls over IP, Resolution: 1920 x 1080 Frame Rates: MJPEG: 0.1 - 30fps H.264: 1/2/3/5/6/10/15/30 Target bit rate: Selection range 64-16384 kbps, Protocols: IPv4, IPv6, TCP/IP, UDP, HTTP, FTP, SNMPv1/v2c/v3 (MIB2), DHCP, DNS, AutoIP, mDNS, ARP, ICMP, POP3, NTP, SMTP, RTP/RTCP, RTSP, SSL/TLS, IPsec, ONVIF Profile S/G, WV-HTTP (Canon proprietary)

SPECIFICATIONS (continue)

	ME20F-SH	ME20F-SH IR Bandpass	ME20F-SH Monochrome	ME20F-SHN
Exposure Modes				
Auto Exposure (AE)	Iris, Gain, Shutter and ND filter operating together, AE shift/AE response selectable, AGC limit can be set from 36dB to 75dB (3dB intervals)	Iris, Gain, Shutter and 2 IR Bandpass filters operating together, 850nm & 940nm IR Bandpass filters, AE shift / AE response selectable, AGC limit can be set from 36dB to 75dB (3dB intervals)	Iris, Gain, Shutter and ND filter operating together, AE shift/AE response selectable, AGC limit can be set from 36dB to 75dB (3dB intervals)	
Manual	Iris: 1/2 stops or 1/3 stops (push auto iris can be set to an assign button), Gain: 0dB to 75dB @ 3dB intervals (approx. ISO 4,560,000 equivalent at 75dB) Shutter: 1/3 to 1/2000 (selections depend on system frequency and frame rate)		Iris: 1/2 stops or 1/3 stops (push auto iris can be set to an assign button), Gain: 0dB to 75dB @ 3dB intervals (approx. ISO 6,000,000 equivalent at 75dB) Shutter: 1/3 to 1/2000 (selections depend on system frequency and frame rate)	Iris: 1/2 stops or 1/3 stops (push auto iris can be set to an assign button), Gain: 0dB to 75dB @ 3dB intervals (approx. ISO 4,560,000 equivalent at 75dB) Shutter: 1/3 to 1/2000 (selections depend on system frequency and frame rate)
Image Control				
Focus Control	Manual focus, One-shot AF (can be set to assign button)			
White Balance	AWB (2000K-15000K), DAYLIGHT, TUNGSTEN, CUSTOM SETA, CUSTOM SET B, COLOR TEMPERATURE			
Opitcal Filters	ND filters: 1/8 & 1/64 Built-in (auto or manual activation) IR cut filter: On/Off (manual activation)	IR Bandpass Filters: 850nm & 940nm IR cut filter: On/Off (manual activation)	ND filters: 1/8 & 1/64 Built-in (auto or manual activation) IR cut filter: On/Off (manual activation)	
Digital Teleconverter	2x, 3x, 4x			
Custom Picture Settings	EOS Standard, Wide DR, Canon Log, Custom 1-6			
Other Functions	Auto black balance, color bar, test tone (interlocking with color bar), assign buttons, peripheral illumination correction, focus limit, crop for EF-S lens, scan reverse, flicker reduction, noise reduction, time display, hour meter			
Power Input				
Terminals	XLR 4-pin or terminal block 2-pin jack			Terminal block 2-pin jack and Ethernet port (PoE+)
Input	Terminal block 2-pin jack: DC +11V ~ +17V			Terminal block 2-pin jack: DC +11V ~ +17V Ethernet: PoE IEEE802.3at Type 2 compliant (PoE+)
Consumption	Power consumption approx. 12W (body only)			Power consumption approx. PoE+ 18W, DC 16W
Other				
Operating Temperature	Approx. 0-40°C (32-104°F)			
Dimensions	4.0 x 4.6 x 4.4 in. (102 x 116 x 113 mm)			
Weight	Approx. 2.4 lbs (1,100g)			Approx. 2.87 lbs (1,300g)
Included in Box	ME20F-SH, 2-pin DC Power Contact, Body Cap			
Related Accessories	Canon RC-V100 Remote Controller, Canon EF Lenses			

TERMINALS AND CONTROLS
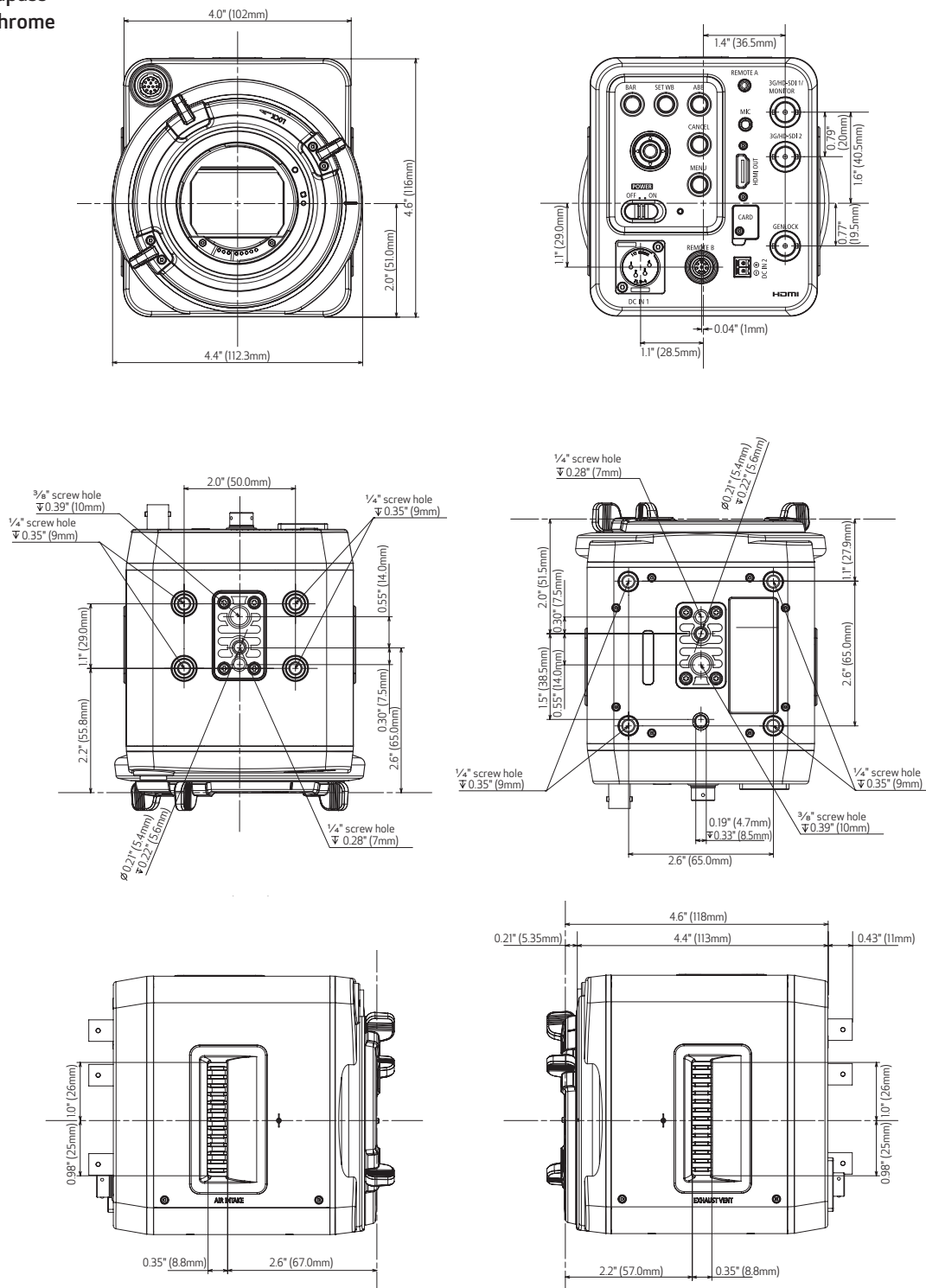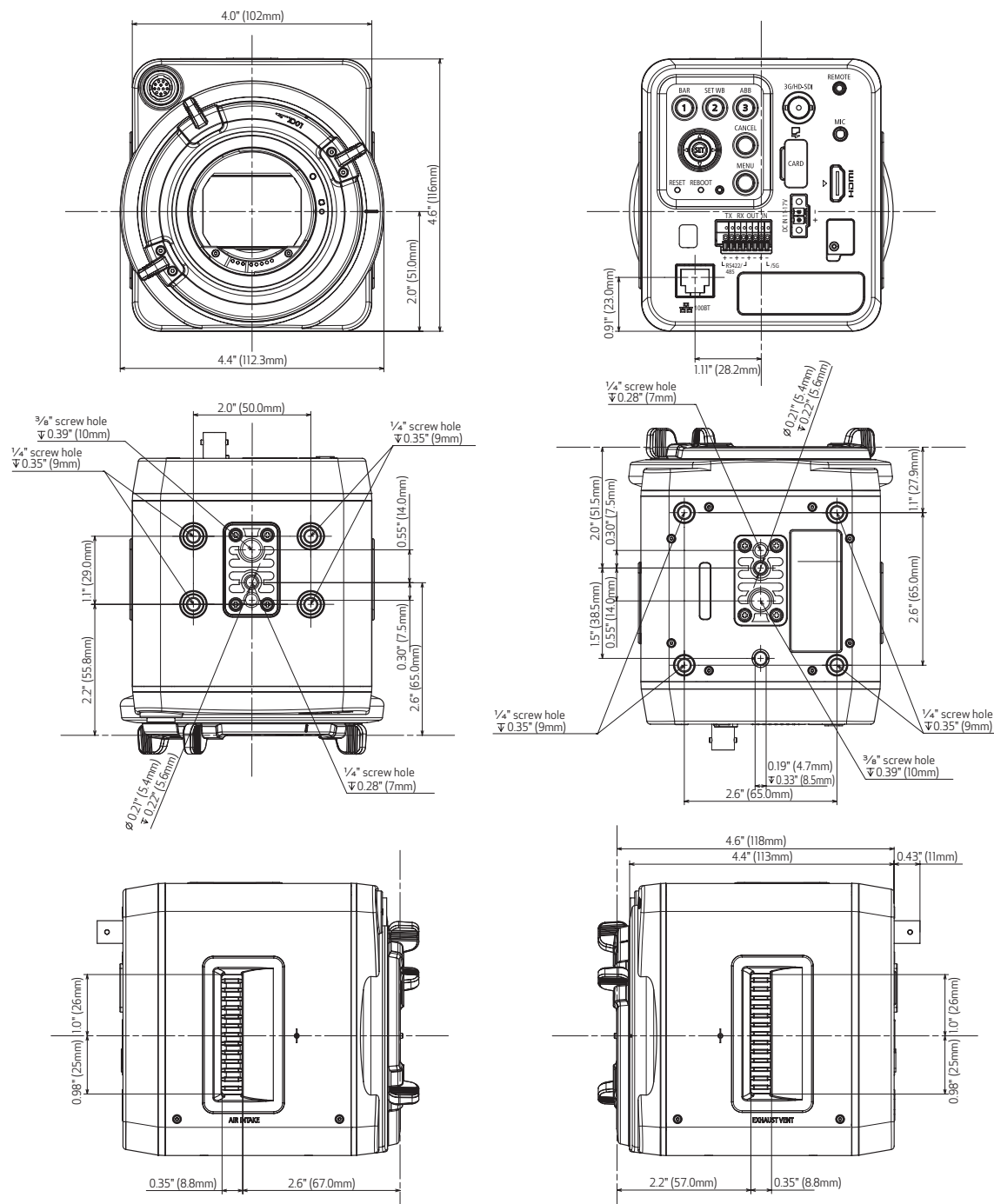
ME20F-SH
ME20F-SH IR Bandpass
ME20F-SH Monochrome

BAR (color bars) button / Assignable button 1
Set WB (custom white balance) button / Assignable button 2
ABB (automatic black balance) button / Assignable button 3
Joystick
Cancel button
Menu button
Power switch
Power LED
DC IN 1 (4-pin XLR)
Remote B (RS-422, 8-pin MXR)

Remote A (Ø2.5 mm stereo mini jack)
3G/HD-SDI 1 (on-screen display output available)
Microphone (Ø3.5 mm stereo mini jack)
3G/HD-SDI 2 (on-screen display output not available)
HDMI output (on-screen display output available)
GENLOCK
microSD card slot for firmware update
DC IN 2 (2-pin power terminal)

ME20F-SHN

BAR (color bars) button / Assignable button 1
Set WB (custom white balance) button / Assignable button 2
ABB (automatic black balance) button / Assignable button 3
Joystick
Cancel button
Reset switch
Reboot switch
Power LED
Menu button
100Base-TX LAN connector (RJ45)

Remote (Ø2.5 mm stereo sub-mini jack)
3G/HD-SDI (on-screen display output available)
Microphone (Ø3.5 mm stereo mini jack)
Memory card slot (for microSD card)
HDMI output (on-screen display output available)
DC IN 11 - 17V (terminal block 2-pin jack)
External Device I/O Terminal
Serial 422/485 Pass Through Terminal

DIMENSIONS

ME20F-SH
ME20F-SH IR Bandpass
ME20F-SH Monochrome

DIMENSIONS

ME20F-SHN

Canon U.S.A., Inc.
One Canon Park
Melville, NY 11747 U.S.A.

@CanonUSApro

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