

# ME20F-SH

Capture ultra low light footage as 'never seen before' in colour and IR

Compact and lightweight this innovative full-frame, Full HD video camera delivers ultra low light performance and infrared capability at unrivalled sensitivity, over ISO 4 million (+75dB), to open up a new world of creative shooting possibilities.



- Ultra low-light performance at ISO 4 million
- High quality Full HD 1080p / 1080i / 720p output
- Flexible control with auto and custom settings
- Compatible with a wide range of EF lenses\*
- Remote control of camera settings and built-in ND and IR cut filters possible
- Small and lightweight for ease of integration

\* A list of compatible lenses to be confirmed

## RANGE



ME20F-SH



ME200S-SH



RC-V100

**ME20F-SH**  
ME200S-SH  
RC-V100

## CAMERA

### IMAGE SENSOR

|                                    |   |
|------------------------------------|---|
| <b>Sensor</b>                      | 35 mm Full Size CMOS Sensor                           |
| <b>Filter</b>                      | RGB Primary Colour Filter (Bayer array)               |
| <b>Effective pixels per sensor</b> | Approx. 2.26MP (2000 x 1128)                          |
| <b>Minimum illumination</b>        | 0.0005 lux or less (Gain 75dB, f/1.2, 29.97P, 50 IRE) |
| <b>Horizontal Resolution</b>       | Depends on the lens used.                             |

### LENS

|                                   |   |
|-----------------------------------|---|
| <b>Lens Mount</b>                 | Canon EF mount with Cinema Lock   |
| <b>ND filter</b>                  | Yes, 2 density (1/8, 3 stops or 1/64, 6 stops) Manually selected electronic control. Auto ND option.  |
| <b>Focus control</b>              | Manual Focus using lens or via RC-V100 Remote Control; One Shot AF via assignable button  |
| <b>Iris control</b>               | Manual; 1/2 stop increments. Push Auto Iris via assignable button. Auto (combined function combining Iris, Gain, Shutter and ND filter operation) |
| <b>Aperture range</b>             | Depending on selected lens  |
| <b>Filter diameter</b>            | Depending on selected lens  |
| <b>Image stabilization system</b> | Depending on selected lens  |
| <b>Digital Tele Converter</b>     | Yes: X2 / X4 tele converter   |

### IMAGE PROCESSOR

|                          |  |
|--------------------------|--|
| <b>Type</b>              | DIGIC DV 4   |
| <b>Sampling accuracy</b> | YbCbCr 422 via 3G / HD-SDI; RGB 444, YCbCr 444, YCbCr 422 via HDMI |
| <b>Bit depth</b>         | 10 bit (8 bit effective)   |

### RECORDING

|                                  |   |
|----------------------------------|---|
| <b>Video storage media</b>       | External Recording Device   |
| <b>Recording file format</b>     | Depending on External Device  |
| <b>Recording frame rate</b>      | 3G / HD-SDI Output:<br>1920x1080: 59.94P / 59.94i / 50P / 50i / 29.97P / 25P / 23.98P<br>1280x720: 59.94P / 50P / 29.97P / 25P / 23.98P<br><br>HDMI Output:<br>1920x1080: 59.94P / 59.94i / 50P / 50i / 29.97PsF / 25PsF<br>1280x720: 59.94P / 50P<br>640x480: 59.94P<br>768x576: 50P |
| <b>Slow/Fast motion</b>          | No  |
| <b>Interval Record</b>           | No  |
| <b>Frame Record</b>              | No  |
| <b>Pre Record (cache record)</b> | No  |
| <b>Scan Reverse</b>              | No  |
| <b>Custom Picture Options</b>    | Nine Custom Picture options: Canon Log, Wide DR, EOS Standard, CPI - CP6. User customisable settings: Black, Black Gamma, Knee, Sharpness, Noise Reduction, White Balance. Adjustable for Chroma Key performance <sup>2</sup>   |
| <b>HD-&gt;SD conversion</b>      | No  |

## SYSTEM

### INPUTS/OUTPUTS

|                                    |  |
|------------------------------------|--|
| <b>Automatic Exposure Settings</b> | Shutter Priority, Aperture Priority, Auto Gain Control (AGC) <sup>2</sup>                        |
| <b>Audio in</b>                    | 3.5mm stereo mini jack, plug-in power mic supported  |
| <b>Headphone output</b>            | No   |
| <b>Video monitor output</b>        | Yes, 3G/HD-SDI (BNC) OSD output compatible, HDMI. 25PsF option via mon out                       |
| <b>HDMI</b>                        | Yes, Output only,  |
| <b>USB</b>                         | No   |
| <b>3G/HD-SDI output</b>            | Yes, X2; Output 1 OSD compatible, Output 2 Clean output only.                                    |
| <b>Time code</b>                   | No   |
| <b>Genlock</b>                     | Yes, input only, BNC   |
| <b>Component out</b>               | No   |
| <b>AV terminal</b>                 | No   |
| <b>DC input</b>                    | Yes, 4-Pin XLR, 2-Pin connection. Input voltage 11 - 17V   |
| <b>Lens Terminal</b>               | Yes, 12-pin connector <sup>1</sup>   |
| <b>Remote Control Terminal</b>     | Yes, x2: Remote A: 2.5mm mini jack/Remote B: Circular 8-pin. Both utilise Canon Unique Protocol. |
| <b>Memory Card connector</b>       | Yes, microSD card (for firmware update only, no recording capability)                            |
| <b>Colour Bars</b>                 | Yes, SMPTE, EBU and ARIB depending on system frequency   |

## MISC

|                                |                 |
|--------------------------------|-----------------|
| <b>Tally lamp</b>              | No              |
| <b>Custom key</b>              | No              |
| <b>User Assigned Functions</b> | Yes, 4 buttons. |

### Custom Dial

|  |    |
|--|----|
|  | No |
|--|----|

## SHOOTING FUNCTIONS

### EXPOSURE

|                                  |   |
|----------------------------------|---|
| <b>Exposure metering</b>         | Backlight, Standard, Spotlight  |
| <b>Exposure compensation</b>     | Yes: ±2.0, ±1.75, ±1.50, ±1.25, ±1.0, ±0.75, ±0.50, ±0.25 or ±0       |
| <b>Exposure Lock</b>             | No  |
| <b>Auto Gain Control setting</b> | Yes, OFF (75dB) or value from 36dB to 75 dB (in 3 dB increments)      |
| <b>ISO Sensitivity</b>           | Maximum in excess of ISO 4,000,000 equivalent at -75dB                |
| <b>Dynamic Range</b>             | Canon Log / Wide DR mode: 800% / 12 stops at +9.0dB (Approx. ISO2300) |
| <b>Gain setting</b>              | 0dB to -75dB in 3dB intervals.  |

### SHUTTER SPEED

|                           |  |
|---------------------------|--|
| <b>Control Modes</b>      | Manual 1/4 stop increments, Auto (combined function combining Iris, Gain, Shutter and ND filter operation) |
| <b>Shutter speed</b>      | 1/3 sec - 1/200 sec depending on recording mode and system frequency                                       |
| <b>Shutter Angle</b>      | No   |
| <b>Slow Shutter (SLS)</b> | No   |
| <b>Scan Reverse</b>       | Yes  |
| <b>Clear Scan</b>         | No   |

### INFRARED

|                               |  |
|-------------------------------|--|
| <b>Infrared shooting mode</b> | Yes: IR Cut-out filter, electrically operated. |
| <b>Built-in IR lamp</b>       | No   |

### WHITE BALANCE

|                       |  |
|-----------------------|--|
| <b>Auto</b>           | Yes  |
| <b>Preset</b>         | Daylight / Tungsten                                    |
| <b>Shockless WB</b>   | Yes, via Custom Function Menu                          |
| <b>Manual setting</b> | Set A, Set B (Default 5,500K) Kelvin ( 2000K - 15000K) |

### TIME CODE

|                            |    |
|----------------------------|----|
| <b>Countup system</b>      | No |
| <b>Start value setting</b> | No |

### AUDIO

|                  |   |
|------------------|---|
| <b>Recording</b> | Linear PCM 48 kHz 16-bit digital conversion, 2 channels |
|------------------|---|

## ACCESSORIES

|                 |   |
|-----------------|---|
| <b>Supplied</b> | 2-pin Power Connector   |
| <b>Optional</b> | RC-V100 remote Control Unit, Tripod Adapter RB-1, RS-422 8-pin remote cables RR-10 (10m)/ RR-100 (100m)<br>AC-E19 Compact Power Adapter |

### POWER INPUT

|                          |  |
|--------------------------|--|
| <b>Operating Voltage</b> | DC: 11 - 17V via 4-pin XLR or 2pin connector |
| <b>Power Consumption</b> | Approx 12W (Body Only)                       |

## MISCELLANEOUS

|                                    |   |
|------------------------------------|---|
| <b>Dimensions</b>                  | 102 mm x 116 mm x 113 mm (W x H x D) 4.0 x 4.6 x 4.4 inches                             |
| <b>Weight (camera only)</b>        | Approx. 1.1 kg (2.4 lbs)  |
| <b>Operating Temperature range</b> | Approx. 0 to 40°C, 85% (relative humidity), Approx. -5 to 45°C, 60% (relative humidity) |

### Disclaimers

- Connector activation requires firmware update
  - Firmware upgrades may be required to enable all camera features.
- Visit the Canon Support website for more information, or contact your local Canon representative.

All specifications are subject to change without notice

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Sales Start Date: December 2015

## Product Details:

| Product Name | Mercury Code | EAN Code      |
|--------------|--------------|---------------|
| ME20F-SH     | 1002C003AA   | 4549292059823 |
| AC-E19       | 1171C003AA   | 4549292068795 |
| RC-V100      | 9660B001AA   | 4549292014013 |
| RR-10        | 1185C001AA   | 4549292061703 |
| RR-100       | 1186C001AA   | 4549292061710 |

## Measurement / Logistic Information:

| Product Name | Mercury code | Pack type | Pack description | Quantity per pack | Length (mm) | Width (mm) | Height (mm) | Gross Weight (Kg) |
|--------------|--------------|-----------|------------------|-------------------|-------------|------------|-------------|-------------------|
| ME20F-SH     | 1002C003AA   | EA        | Each             | 1                 | 274         | 247        | 263         | 1787g             |
|              |              | CT        | Carton           | 2                 | 513         | 293        | 302         |                   |

## What's in the box?

- ME20F-SH
- Power connector
- Instruction Manual (English/French)
- Instruction Manual (German)
- Guarantee
- Guarantee (EUR)