CRESTRON FLEX M150 SERIES

The Crestron Flex M150 combines high-performance audio and touch screen control with the power of the Crestron UC ENGINE to transform your meeting room into a world-class UC and collaboration space. The full kit seamlessly integrates with Microsoft Teams™, Skype® for Business, and Zoom Rooms™ software in an exceptionally easy-to-use and manage solution.

As Crestron's flagship UC product, Crestron Flex M150 takes a new approach to the notoriously complex and disjointed world of telephony. By leveraging the flexibility of an open platform, Crestron is able to natively support Microsoft Teams, Skype for Business, Zoom Rooms video functionality with our UC ENGINE and USB camera. Crestron UC devices provide a simple, easy-to-use and manage way to collaborate from anywhere work is done. Crestron Flex M150 can be centrally provisioned and managed via the Crestron XiO Cloud™ IoT-based platform, resulting in tremendous time and cost savings.

CRESTRON MERCURY® TABLETOP CONFERENCING SYSTEM

With an attractive, practical design and unrivaled sound quality, Crestron Mercury delights the user and delivers a native platform experience from Microsoft with a minimum of distractions. A large, high-resolution color display is at the center of the Crestron Mercury experience. Wideband audio capability provides crystal clear speech during calls. A 360-degree array of sensitive microphones and a full-range speaker further enhances audio quality during meetings. Crestron Mercury delivers nothing less than the best possible communications experience.

UC ENGINE

The Crestron UC ENGINE is the driving force in a Crestron Flex M150 meeting space. With an incredibly powerful NUC PC at its core, the UC ENGINE ensures a flawless meeting experience no matter the type of space, number of participants, type of presentation content, or number of video streams. The UC ENGINE interfaces directly with the Crestron Mercury, Huddly IQ® video conferencing camera, and HDMI® to USB video converter (HD-CONV-USB-200).

HD TO USB VIDEO CONVERTER

Want to show content to participants in the room and on the call? No problem. With the HD-CONV-USB-200 you can effortlessly display your content to local and remote participants through the Crestron UC-ENGINE. Just connect and go!

HUDDL Y GO 2.0 VIDEO CONFERENCING CAMERA

With auto-zoom, people counting, and a perfect picture, the Huddly GO 2.0 camera delivers nothing less than the best possible video conferencing experience. It’s as simple to set up out-of-the-box as it is to use, with no configuration required.

CRESTRON XI O CLOUD

Crestron Flex M150 devices benefit from zero-touch deployment via the Crestron XiO Cloud. With only the serial number and device MAC address, which are provided at shipment, a network admin can remotely configure the devices before they even arrive on-site.

Once online it will connect to the Cloud, retrieve its configuration and then, within seconds, be ready to make calls. Using the Crestron XiO Cloud dashboard, the network admin is able to manage every connected workplace device from Crestron and supported partners.
**SPECIFICATIONS**

**Components:**

- Base unit with speakerphone & audio conferencing capabilities via SIP, Bluetooth, & USB
- USB cable for laptop computer, Type A male to micro-B male, 6 ft (1.83 m), Model: CBL-USB-A-BMICRO-6
- Ethernet LAN cable, RJ45 male-to-male, 12 ft (3.66 m)
- Cable retention plate & tie wraps
- Universal power pack, Model: PW-2420RU

**Management and Security**

Crestron Mercury is an enterprise-grade appliance, ideally equipped for mass deployment throughout any-sized corporate, university, medical, military, or governmental facility. Cloud-based provisioning\(^1\) enables complete network configuration in advance of hardware delivery, with touchless updates following installation. Devices can also be configured individually using a computer web browser.

802.3at PoE+ compatibility enables Crestron Mercury to be powered through its primary LAN connection.\(^2\)

1. LDAP corporate directory access, built-in PinPoint beacon, and cloud-based provisioning are not enabled at this time. These features will be enabled in the future via firmware update.
2. When used without any microphone pods connected, the system may be powered using either PoE+ or the included power pack (model PW-2420RU). If one or two mic pods are connected, the system MUST be powered using the power pack. PoE+ cannot be used to power the system if any mic pods are connected. When using PoE+, make sure the network switch supports PoE+ (802.3at Type 2). Regular PoE (802.3af or 802.3at Type 1) cannot be used to power the system.

Crestron recommends using the CEN-SW-POE-16 16-port switch, which supports PoE+. Please be aware, the CEN-SW-POE-5 5-port switch does NOT support PoE+ and cannot be used to power the system.

**Communications**

- **Ethernet:** 10/100 Mbps (x2), auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), SRTP, IEEE 802.1X, HTTPS secure provisioning, IEEE 802.3at Type 2 compliant.

- **Mic Pod:** A²B bus protocol, single master, multiple slave; synchronous data, multichannel I2S/TDM to I2S/TDM.

- **AEC:** Limes Audio TrueVoice acoustic echo cancellation, automatic mic mixing, automatic gain control, and dynamic noise reduction; full-duplex IEEE 1329 Type 1 compliant.

- **Microphones:** Quad mic array with (4) cardioid electret elements; Pickup Range: 20 ft (6 m) typical

- **Speaker:** Full range speaker; Amplifier Power: 11 Watts maximum; Output Volume: 95 dB SPL at 0.5 m; Frequency Response: 90 Hz to 22 kHz

**Occupancy Sensor**

- **PIR Detection Range:** 6 ft (1.83 m) in front of touch screen, wakes system (touch screen and video display) and reports room occupancy to Crestron Fusion.

- **Voice Activity Detection:** Keeps room occupancy, touch screen, and display active as long as speech is detected through the microphones

**Touch Screen**

- **Display Type:** TFT active matrix color LCD
- **Size:** 7 inch (178 mm) diagonal
- **Aspect Ratio:** 16:9 HD 720
- **Resolution:** 1280 x 720 pixel
- **Touch Screen:** Capacitive, multi-touch capable
- **Character Support:** Unicode UTF-8

**Language Support:** Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch (NL), English (UK), English (US), Finnish, French (FR), German (DE), Greek, Hebrew, Hungarian, Italian (IT), Japanese (JP), Korean, Norwegian (NO), Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian (RU), Slovak, Spanish (ES), Swedish, Thai

**Buttons & Indicators**

- **Mic Mute Symbol & Light Bar:** (2) Capacitive “buttons” with bi-color LEDs, either button toggles between mute and unmute, the symbol LED blinks green when the unit is powering up, all LEDs illuminate red when the mic is muted (and a red border appears around the touch screen display), all LEDs illuminate green when the mic is unmuted if a USB device is connected.
### Connectors

**G:** (1) 6-32 screw; Chassis ground lug  
**LAN:** (1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX Ethernet port; PoE+ PD port [3]  
**USB B:** (1) Micro-USB Type B connector, female; USB 2.0 device port; 6 ft (1.83 m) micro-B male to A male USB cable included  
**MIC POD 1 – 2:** (2) RJ9 4P4C connectors, female; For connection of up to two CCS-UCA-MIC microphone pods (sold separately) [3]  
**24V DC 2.5A:** (1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input for universal power pack [3]

### Power

**Power Pack (included):** Input: 100-240 Volts AC, 50/60 Hz; Output: 2.5 Amps @ 24 Volts DC; Model: PW-2420RU [3]  
**Power over Ethernet:** IEEE 802.3at Type 2, Class 4 (25.5 W) PoE+ Powered Device [3]  
**Power Consumption:** 20 Watts (typical)

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### Environmental

**Operational Temperature:** 32° to 95° F (0° to 35° C)  
**Storage Temperature:** -4° to 160° F (-20° to 70° C)  
**Humidity:** 5% to 95% RH (non-condensing)  
**Heat Dissipation:** 123 BTU/hr (typical)

### Dimensions

**Height:** 4.11 in (105 mm)  
**Width:** 8.92 in (227 mm)  
**Depth:** 12.74 in (324 mm)

### Weight

5.5 lb (2.5 kg)

### Compliance


### UC Engine Specifications:

**Processor:** 6th generation Intel® Core™ i7-6770HQ processor with Intel® Iris™ Pro graphics (2.6 to 3.5 GHz Turbo, Quad Core, 6 MB Cache, 45W TDP)  
**RAM:** 8GB (2x4GB) DDR4 2400MHz  
**Storage:** 128GB m.2 SSD  
**Networking:** Intel® I219-LM 10/100/1000 Mbps Ethernet  
**Power:** 19V, 120W AC-DC power adapter

### Camera

**Software Specifications:**  
High-quality video scaling and dewarping  
Flicker elimination  
Robust automatic white balance  
Optical aberration correction  
3D Noise Reduction  
**Color:** Gray matters

**Easy Installation:**  
Flexible mounting options  
Suitable for desktop and room scenarios

**Hardware Specifications:**  
High-grade 6 element ultra-wide angle optics  
Horizontal field of view 120 degrees  
Vertical field of view 90 degrees  
Diagonal field of view 150 degrees  
f/2.8 aperture  
16 Megapixel 1/2.2" CMOS Sensor  
SuperSpeed USB  
High-Performance video processing engine  
Low power consumption

**Video**  
HD 720p 30fps output  
16:9 aspect ratio  
Digital Pan/Tilt/Zoom with 3x lossless digital zoom  
UVC 1.1 Compatible  
YCbCr 4:2:0 and YCbCr 4:2:2 support over USB
### Included Accessories

- **PW-2420RU**: Desktop Power Pack, 24VDC, 2.5A, 2.1mm, Universal (Qty. 1 included).
- **CBL-USB-A-EXT-15**: USB Extension Cable, Type A Male-to-Female, 15 ft (4.57 m) (Qty. 1 included).
- **CBL-USB-A-BMICRO-6**: USB Cable, Type A Male to Micro-B Male, 6 ft (1.83 m)

### Available Accessories

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<tr>
<td><strong>CCS-UCA-SMK</strong>: Swivel Mount Kit for CCS-UC-1</td>
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<tr>
<td><strong>CEN-SWPOE-16</strong>: 16-Port Managed PoE Switch</td>
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<tr>
<td><strong>CCS-UCA-MIC KIT</strong>: Microphone Pods for CCS-UC-1, set of two</td>
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<tr>
<td><strong>CCS-UCA-MIC W/PS KIT</strong>: Microphone Pods for CCS-UC-1, set of two w/Universal Power Pack</td>
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<tr>
<td><strong>CNSP-XX</strong>: Custom Serial Interface Cable</td>
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<tr>
<td><strong>SW-FUSION-EM</strong>: Fusion EM® Energy Management Software; contact Crestron Sales Support Services for a quote</td>
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<tr>
<td><strong>CBL-MULTI-HD-6</strong>: Crestron Mercury™ Multihead HD Video Cable, 6 ft (1.8 m)</td>
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<td><strong>CCS-UCA-EXT KIT</strong>: Display &amp; Camera Extender Kit for CCS-UC-1</td>
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<td><strong>HD-EXT-USB-2000-C</strong>: 4K HDMI® &amp; USB over HDBaseT® Extender 2000</td>
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