**SECTION 27 41 16**

**INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT**

**GUIDE SPECIFICATION**

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*Specifier: Please see PART 4 for a listing of products specified in this Guide Specification.*

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# **GENERAL**

## **MOBILE UNIFIED COMMUNICATIONS AND COLLABORATION SYSTEMS**

### 20 foot Microphone range

### 12 foot Microphone range

## **RELATED REQUIREMENTS**

### Section 25 08 00 - Commissioning of Integrated Automation

### Section 25 10 00 - Integrated Automation Network Equipment

### Section 25 11 13 - Integrated Automation Network Servers

### Section 25 13 13 - Integrated Automation Control and Monitoring Network Supervisory Control

### Section 25 13 16 - Integrated Automation Control and Monitoring Network Integration Panels

### Section 25 13 19 - Integrated Automation Control and Monitoring Network Interoperability

### Section 25 15 16 - Integrated Automation Software for Control and Monitoring Networks

### Section 26 09 43.13 - Digital-Network Lighting Controls

### Section 27 15 00 - Communications Horizontal Cabling

### Section 27 41 00 - Audio-Video Systems

# **PRODUCTS**

## **MOBILE UC SYSTEM TYPES**

### 20 foot Microphone range System

#### Integrated UC Engine

*Specifier Notes:*

*Native Zoom Rooms™ Software Experience*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software for easy collaboration and content sharing.*

*Native Microsoft Teams® Software Experience*

*Teams "T" UC systems feature Microsoft Teams conferencing software for easy collaboration and content sharing.*

##### Unified collaboration engine shall include pre-installed conferencing software.

#### Basis of Design Mobile UC System

##### Crestron UC-FCM-Z

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCM-Z*

##### Crestron UC-FCM-T

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCM-T*

#### System Components

##### Camera

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Accessories/CCS-CAM-USB-F-400*

##### Microphone

###### The microphone shall be a sub-component of the user interface unit.

##### Speaker

###### The speaker shall be a sub-component of the user interface unit.

##### User Interface

###### Shelf mounted unit shall include an integrated touch screen user interface.

###### Shelf mounted unit shall display system information via touch screen display.

###### Shelf mounted unit shall include integrated microphone and speaker.

##### UC Engine

###### Unit shall support the following:

*Specifier Notes:*

*System is pre-configured for Zoom or Teams, not both.*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software.*

*Teams "T" UC systems feature Microsoft Teams conferencing software.*

Microsoft Teams

Zoom

##### Mobile Cart

###### The mobile cart shall house all integrated system components.

*Specifier Note: The content display monitor is NOT included. The display shall be provided and installed on to the cart by integrator or end-user.*

###### Display Mount

Integrator or End-User shall install display.

The mobile cart shall support mounting of a 50 inch to 60 inch display.

*Specifier Note:*

*Supports most 50 in. to 60 in. displays (not included in Crestron mobile cart kit). Display shall be specified separately.*

### Universal Platform 20 foot Microphone range System

#### Universal Platform Funtionality

*Specifier Note:*

*Universal Platform Support*

*High Definition video conferencing is enabled by connecting a computer or mobile device running a web conferencing or UC application such as Microsoft Teams®, Skype® for Business, Cisco WebEx®, GotoMeeting®, Slack®, BlueJeans, or Zoom Rooms™ software to the included CCS-UC-1X unit.*

##### Connection for user provided laptop with conferencing software shall be included.

#### Basis of Design Mobile UC System

##### Crestron UC-FCM-U

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCM-U*

#### System Components

##### Camera

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Accessories/CCS-CAM-USB-F-400*

##### Microphone

###### The microphone shall be a sub-component of the user interface unit.

##### Speaker

###### The speaker shall be a sub-component of the user interface unit.

##### User Interface

###### Shelf mounted unit shall include an integrated touch screen user interface.

###### Shelf mounted unit shall display system information via touch screen display.

###### Shelf mounted unit shall include integrated microphone and speaker.

##### HDMI over Twisted Pair Cable Receiver

##### Mobile Cart

###### The mobile cart shall house all integrated system components.

*Specifier Note: The content display monitor is NOT included. The display shall be provided and installed on to the cart by integrator or end-user.*

###### Display Mount

Integrator or End-User shall install display.

The mobile cart shall support mounting of a 50 inch to 60 inch display.

*Specifier Note:*

*Supports most 50 in. to 60 in. displays (not included in Crestron mobile cart kit). Display shall be specified separately.*

### BYOD and Integrated Platform 20 foot Microphone range System

#### Bring Your Own Device Capability

*Specifier Note:*

*Bring Your Own Device (BYOD)*

*Meeting participants can connect their laptop computer to the R-Series system to use their own UC conference platform. The system's built-in content ingest device automatically switches to the connected laptop's UC platform and returns to the native Zoom Rooms or Teams environment when disconnected.*

#### Integrated UC Engine

*Specifier Notes:*

*Native Zoom Rooms™ Software Experience*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software for easy collaboration and content sharing.*

*Native Microsoft Teams® Software Experience*

*Teams "T" UC systems feature Microsoft Teams conferencing software for easy collaboration and content sharing.*

##### Unified collaboration engine shall include pre-installed conferencing software.

#### Basis of Design Mobile UC System

##### Crestron UC-FCMX-T

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCMX-T*

##### Crestron UC-FCMX-Z

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCMX-Z*

#### System Components

##### Camera

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Accessories/CCS-CAM-USB-F-400*

##### Microphone

###### The microphone shall be a sub-component of the user interface unit.

##### Speaker

###### The speaker shall be a sub-component of the user interface unit.

##### User Interface

###### Shelf mounted unit shall include an integrated touch screen user interface.

###### Shelf mounted unit shall display system information via touch screen display.

###### Shelf mounted unit shall include integrated microphone and speaker.

##### HDMI over Twisted Pair Cable Receiver

##### UC Engine

###### Unit shall support the following:

*Specifier Notes:*

*System is pre-configured for Zoom or Teams, not both.*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software.*

*Teams "T" UC systems feature Microsoft Teams conferencing software.*

Microsoft Teams

Zoom

##### Mobile Cart

###### The mobile cart shall house all integrated system components.

*Specifier Note: The content display monitor is NOT included. The display shall be provided and installed on to the cart by integrator or end-user.*

###### Display Mount

Integrator or End-User shall install display.

The mobile cart shall support mounting of a 50 inch to 60 inch display.

*Specifier Note:*

*Supports most 50 in. to 60 in. displays (not included in Crestron mobile cart kit). Display shall be specified separately.*

### 15 foot Microphone range System

#### Integrated UC Engine

*Specifier Notes:*

*Native Zoom Rooms™ Software Experience*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software for easy collaboration and content sharing.*

*Native Microsoft Teams® Software Experience*

*Teams "T" UC systems feature Microsoft Teams conferencing software for easy collaboration and content sharing.*

##### Unified collaboration engine shall include pre-installed conferencing software.

#### Basis of Design Mobile UC System

##### Crestron UC-FCB-T

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCB-T*

##### Crestron UC-FCB-Z

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-R-Series/UC-FCB-Z*

#### System Components

##### Camera

*Specifier Note:*

*For more information please see: https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Accessories/CCS-CAM-USB-F-400*

###### The camera shall be a sub-component of the speaker bar unit.

##### Microphone

###### The microphone shall be a sub-component of the speaker bar unit.

##### Speaker bar

##### User Interface

###### Shelf mounted touch screen user-interface unit shall display system information via touch screen display.

##### UC Engine

###### Unit shall support the following:

*Specifier Notes:*

*System is pre-configured for Zoom or Teams, not both.*

*Zoom "Z" UC systems feature Zoom Rooms conferencing software.*

*Teams "T" UC systems feature Microsoft Teams conferencing software.*

Microsoft Teams

Zoom

##### Mobile Cart

###### The mobile cart shall house all integrated system components.

*Specifier Note: The content display monitor is NOT included. The display shall be provided and installed on to the cart by integrator or end-user.*

###### Display Mount

Integrator or End-User shall install display.

The mobile cart shall support mounting of a 50 inch to 60 inch display.

*Specifier Note:*

*Supports most 50 in. to 60 in. displays (not included in Crestron mobile cart kit). Display shall be specified separately.*

# **EXECUTION**

*NOT USED in this Guide Specification. Specifier shall Specify PART 3 On-Site work as needed.*

# **APPENDICES**

## **SPECIFIED PRODUCTS**

*Specifier Note: This Article includes Crestron products specified in this Guide Specification document. This Article is for reference only and should not be required in actual project manual unless included in an overall system equipment list.*

### Crestron UC-FCM-U

### Crestron UC-FCM-Z

### Crestron UC-FCM-T

### Crestron UC-FCMX-T

### Crestron UC-FCMX-Z

### Crestron UC-FCB-T

### Crestron-UC-FCB-Z