# **Operator Interfaces**



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# CTVue — Graphical Human Machine Interface

Control Techniques offers a complete range of HMI (Human Machine Interface) display panels. CTVue Configurator software is FREE and makes programming these HMIs quick and intuitive. The CTVue Configurator software includes built-in communication drivers and predefined drive parameters to speed integration with all Control Techniques drive lines. The broad hardware offering also ensures there is a CTVue HMI that balances price and functionality.

The 4.3-inch CTVue 304KE is designed for applications where available mounting space is at a premium. The smallest touchscreen in the CTVue family, just over 5 inches wide and 4 inches tall, the 304KE boasts a bright TFT (thin film transistor) display with full 32K-color support.

For small and economical displays, the 303L and 303M and offer a 3.2-inch monochrome graphical LCD display. The 303L is the low-cost choice with one RS485 port. The 303M is full featured with one Ethernet, one RS485, two RS232, and one Compact Flash port.

For medium-size displays, the 306M/A and 308A graphical touchscreens provide larger screens for enhanced display of graphics. The 306 and 308 versions include Ethernet, one RS485, two RS232, and one Compact Flash port and are available with color or monochrome graphical display.

For large displays, the 310C and 315C graphical color touchscreens provide the most graphical display area while offering all the connectivity and features of the 306 and 308 series plus a USB host port and option for an additional Ethernet port. Super-bright NEMA 4X outdoor versions are also available - 303S, 306MS and 310S.

All of the CTVue HMIs, except the CTVue 304KE, have a Compact Flash port which allows for storage and transfer of data from a variety of external data sources using a standard Compact Flash card (order separately).



### **Key Features**

- Integrated Control Techniques drivers
- Remote web and FTP access (except 304KE)
- Powerful protocol converter
- USB programming port (except 304KE)
- Alarming and data logging
- Bright TFT color display offerings
- Free, simple-to-use, programming software
- Flexible Compact Flash slot (except 304KE)
- Security user levels/passwords
- Available front faceplate customization
- For use in hazardous locations
- 24 Vdc operation

### CTVUE-304KE



- 4.3-inch, 480 x 272, Graphic Touch, TFT, 32K-color display
- Ethernet, RS485 and RS232 port
- 128MB onboard flash memory

## CTVUE-303L/M/S



- 3.2-inch, 128 x 64, LCD, monochrome display
- Ethernet (M), RS485 (L), outdoor version available (S)
- 8 x customizable function keys
- Compact Flash slot (M)(S)
- 4 MB non-volatile flash memory
- USB host port

## CTVUE-306M/A/MS



- 5.7-inch, 320 x 240, Graphic Touch display
  - (M) LCD, monochrome
  - (A) TFT, 256-color
  - (MS) LCD, monochrome (with UV protection for outdoors)
- Ethernet, RS485 and RS232 port
- Compact Flash slot
- 4/8 MB non-volatile flash memory
- Four programmable soft keys
- USB host port

## CTVUE-308A/E



- 8.4-inch, 640 x 480, Graphic Touch, TFT, 32K-color display
- Ethernet, RS485 and RS232 port
- Compact Flash slot
- 32 MB non-volatile flash memory
- Six programmable soft keys
- USB host port

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# **Operator Interfaces**

# CTVUE-310C | E | R | RE | S | SE



- 10.4-inch, 640 x 480 (C, E, S, SE), 800 x 600 (R, RE), Graphic Color Touch, TFT, 32K-color display
- Ethernet, RS232, RS485 port
- Compact Flash slot
- 32 MB non-volatile flash memory
- Outdoor version available
- USB host port

# CTVUE-315C/E



When mounted using the supplied gasket, all panels have a rating of IP66 / NEMA 4X.

- 15-inch, 1024 x 768, Graphic Color Touch, TFT, 32K-color display
- Ethernet, RS485, and RS232 port
- Compact Flash slot
- 64 MB non-volatile flash memory
- USB host port

Order Code	Description	Dimensions H x W x D (in)	
CTVUE-304KE	4.3", 480 x 272, TFT, 32K-color touchscreen - with RS232, RS485, Ethernet	4 x 5 x 1.5	
CTVUE-303L	3.2", 128 x 64, LCD, monochrome display - with RS485	5.9 x 7.5 x 2.1	
CTVUE-303M	3.2", 128 x 64, LCD, monochrome display - with Ethernet, RS485, RS232, Compact Flash		
CTVUE-303S	3.2", 128 x 64, LCD, monochrome display - with Ethernet, RS485, RS232, Compact Flash (with UV protection for outdoor use)		
CTVUE-306M	5.7", 320 x 240, LCD, monochrome, touchscreen - with Ethernet, RS485, RS232		
CTVUE-306A	5.7", 320 x 240, TFT, 256-color touchscreen - with Ethernet, RS485, RS232	7.1 x 8.8 x 2.3	
CTVUE-306MS	5.7", 320 x 240, LCD, monochrome, touchscreen - with Ethernet, RS485, RS232 (with UV protection for outdoor use)		
CTVUE-308A	8.4", 640 x 480, TFT, 32Kcolor touchscreen - with (1) Ethernet, isolated comms RS485, RS232	8.2 x 10.3 x 2.2	
CTVUE-308E	8.4", 640 x 480, TFT, 32K-color touchscreen - with (2) Ethernet, isolated comms RS485, RS232		
CTVUE-310C	10.4", 640 x 480, TFT, 32k-color touchscreen - with (1) Ethernet, isolated comms RS485, RS232	9.5 x 12.9 x 2.2	
CTVUE-310S	10.4", 640 x 480, TFT, 32k-color touchscreen - with (1) Ethernet, isolated comms RS485, RS232 (with UV protection)		
CTVUE-310E	10.4", 640 x 480, TFT, 32k-color touchscreen - with (2) Ethernet, isolated comms RS485, RS232		
CTVUE-310R	10.4", 800 x 600, TFT, 32k-color touchscreen - with (1) Ethernet, isolated comms RS485, RS232		
CTVUE-310RE	10.4", 800 x 600, TFT, 32k-color touchscreen - with (2) Ethernet, isolated comms RS485, RS232		
CTVUE-310SE	10.4", 640 x 480, TFT, 32k-color touchscreen - with (2) Ethernet, isolated comms RS485, RS232 (with UV protection)		
CTVUE-315C	15", 1024 x 768, TFT, 32k-color touchscreen - with (1) Ethernet, RS485, RS232	13 x 16 x 2.8	
CTVUE-315E	15", 1024 x 768, TFT, 32k-color touchscreen - with (2) Ethernet, RS485, RS232		
CTVUE-CF1000	1 GB industrial Compact Flash memory		
CTVUE-CF2000	2 GB Industrial Compact Flash memory		
CTVUE-CONFIG-CD	FREE programming software CD		
CTVUE-USB	USB Programming cable PC to CTVue		
CTVUE-EP-485-xxx*	RS485 cable; RJ45 to RJ45		
UM-LCD-485-xxx*	RS485 cable for multidrop; RJ45 to RJ45		
CT-USB-CABLE	Modubus (RS485) to USB conversion		
CTVUE-RS00	RS232 / RS485 communications option card		
CTVUE-CN00	CANopen communications option card		
CTVUE-PBDP	Profibus-DP communications option card		
CTVUE-DN00	DeviceNet communications option card		
CTVUE-PRO-4K	Serial Port cable for programming CTVUE-304KE		
CTVUE-ADK-485	DB9-pin connector to RJ45 adaptor (for use with CTVUE-EP-485 cables)		
CTVUE-USB-4K	USB to RS232 converter cable includes CTVUE-PRO-4K cable		

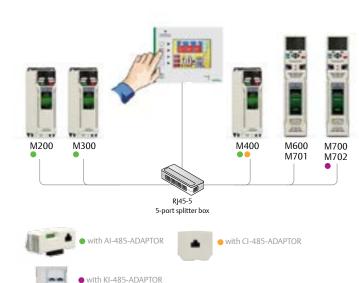
<sup>\*</sup> Standard cable lengths: 5, 15, 25ft (-005) (-015) (-025)

# **CTVue Connectivity and Functionality**

The CTVue touchscreens are easy to set up and connect to your application.

## **Connection to the Serial Port**

The operator interface is connected directly to the RJ45 connection on the serial port of the drive. RS485 is a multi-drop protocol and may be connected to multiple drives if required.

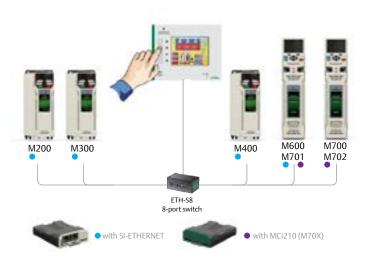


CT Vue Specifications			
Power Input	24 Vdc		
Temperature	32 to 122 °F (0 to 50 °C)		
Environmental	IP66 / NEMA 4X, for use in hazardous locations:*		
	Class I, Division 2, Groups A,B,C and D		
	Class II, Division 2, Groups F and G		
	Class III, Division 2		
Operating Humidity	80% relative maximum from 32 to 122 $^{\circ}$ F (0 to 50 $^{\circ}$ C)		

<sup>\*</sup>see website for individual data sheets

# **Connecting via Ethernet**

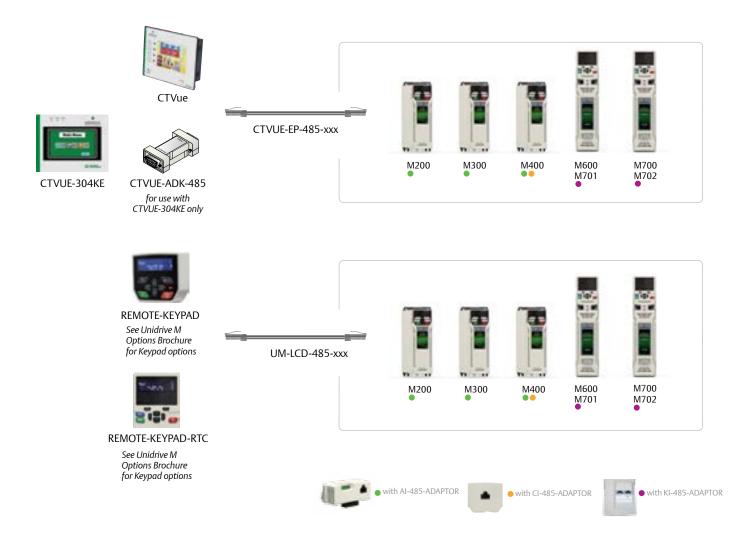
The Unidrive M700, Unidrive M702, SI-ETHERNET, and MCi210 option modules allow the operator interface to be connected to the drive using Modbus TCP/IP.





# **Interconnect Components**

# **Operator Interface Single-drop Cables**





xxx = length in feet

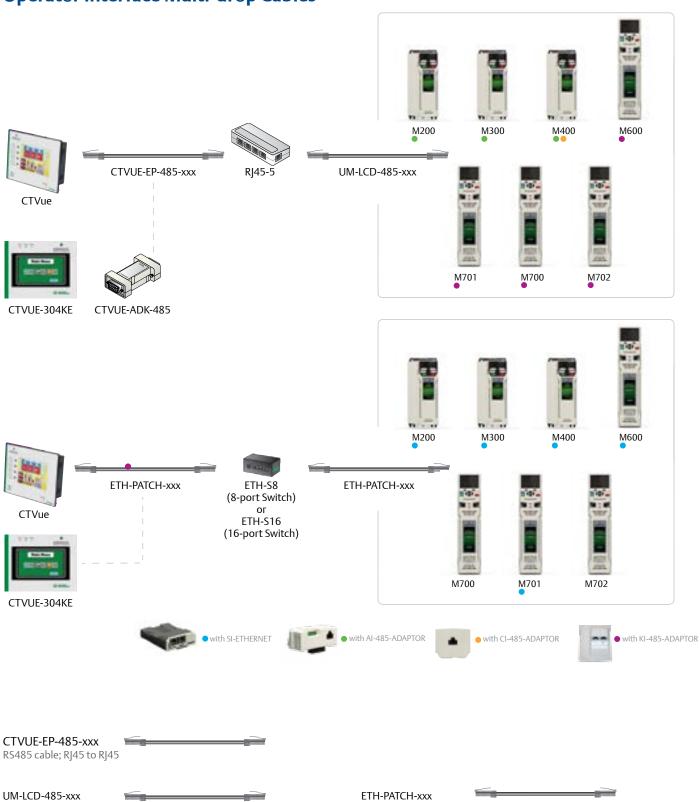
and Unidrive M

## CTVUE-ADK-485

RS485 DB9pin to RJ45 adaptor is used with the CTVUE-304KE and appropriate drive RS485 cable



# **Operator Interface Multi-drop Cables**



RS485 cable for multidrop; RJ45 connector on both ends

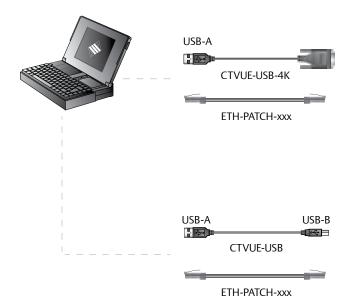
xxx = length in feet

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RJ45 ethernet patch cable; wires dressed at both ends

# **Interconnect Components**

# **Operator Interface Software Cables**







CTVUE-304KE







Connects the Modbus port on the drive (RS485) directly to the USB port on your PC; USB to RS485 conversion

### CTVUE-USB



CTVue USB programming cable: USB Connectors on both ends; USB-A on drive side and USB-B on panel side

### UM-LCD-485-xxx



xxx = length in feet

### RJ45-5





### CTVUE-USB-4K

USB to RS232 converter for programming CTVUE-304KE; this order code includes CTVUE-PRO-4K cable

### CTVUE-PRO-4K

