

Advanced Control Systems

CM182-PVP Human Machine Interface



Human Machine Interface Training System Featuring Allen-Bradley PanelView Plus HMI

The CM182-PVP PanelView Plus Training System is an industrial-based Human Machine Interface (HMI) system featuring Allen-Bradley's industry-leading HMI – PanelView Plus. The PanelView Plus platform provides for colored touch screen display operation, built-in Ethernet connectivity, and powerful FactoryTalk programming software to communicate to PLCs, machines, and other external devices. The CM182-PVP system will enable learners to develop competence in operating, programming, and interfacing a real world industrial HMI system.

Instructor's guide with student manual and exercises provide complete, clear instructions and laboratory hands-on exercises, permitting the student to rapidly attain HMI competency. The flexibility of the CM182-PVP training system and Allen-Bradley's PanelView Plus HMI software lets the user customize system views specific to application needs; thus creating a HMI learning experience that will be industrially relevant today and in the future.

The curriculum begins with basic displays, object drawing, moving quickly to Ethernet communications, data collection and industrial applications. Each lesson progressively builds upon the previously learned material into more complex instruction.

Key CM182-PVP features include:

- 10 inch screen – touch activated
- Colored graphics – create colored screen displays or import graphical designs and pictures
- Trending/Logging – plot or log time based data
- Expressions – modify data based on conditions using logic or mathematical expressions
- Animation – create system simulation movements
- Library – select from a large variety of already created commonly used industrial control graphics
- Programming – easy to use FactoryTalk software
- Ethernet connectivity – built-in Ethernet interface

SPECIFICATIONS

The standard CM182-PVP Human Machine Interface (HMI) training system features the Allen-Bradley PanelView Plus HMI with 10 inch colored touch screen and FactoryTalk HMI programming software. Other PanelView Plus configurations with keypad and function keys, varying size and/or gray scale display screens are available.

Regardless of the configuration selected, using the included instructor's guide and student activity manual with detailed exercises and written testing materials, the learner will develop competence in operating, programming, and interfacing a real world industrial HMI. Also included as standard is an Ethernet connecting cable for HMI to Ethernet network communications and Allen-Bradley's Windows-based FactoryTalk View Machine Edition HMI programming software.

The CM182-PVP Trainer is installed in a 16-gauge fabricated steel "wedge shaped" cabinet. Components are mounted on a 16-gauge brushed stainless steel panel. All features of the panel are silkscreened for easy identification.

CM182-PVP Workstation Specifications:

The workstation is mounted into the cabinet for convenient interfacing with other trainers. A power on toggle switch with light indicator and one amp system fuse protection is located along the cabinet side. The training panel contains the Allen-Bradley PanelView Plus touch screen (internally fused) with built-in 24 VDC power supply, Ethernet port, and prewired auxiliary controls (switches and lights) for machine control replication.

Panel Components:

- PanelView Plus 10 inch display screen
- Ethernet Connector (side located)
- Emergency Stop Switch – red colored, mushroom top, normally closed push button switch with twist release disengagement and yellow colored panel-mounted decal backing
- Start Switch – green colored, normally open push button switch
- Stop Switch – red colored, normally closed push button switch
- Two-colored Stack Light – red and green colored

- Three-Position Selector Switch – black colored, on-off-(on) – latched on, latched off, momentary on
- Interface Terminal – series of banana jacks for electrical I/O interfacing of switches and lights

Allen-Bradley PanelView Plus Specifications:

| | |
|-----------------|---|
| Display Screen: | 10 inch screen size Touch activated Color active matrix (TFT) Resolution: 640 x 480 18-bit color graphics Real time battery-backed clock |
| Capacity: | 25 displays; 200 alarm messages |
| Communications: | One Ethernet port One RS-232 port Two USB ports |
| Programming: | FactoryTalk View ME Software |
| Certification: | U.L. Listed/CSA Approved |

FactoryTalk Software

- 64-bit Windows-based
- Offline/online programming
- Graphical I/O configuration with pre-built visualization component library
- Program reporting and documentation
- Alarming, data logging, trending capability
- Automatic instruction addressing, block transfer placement, and tag generation
- Scalability across multiple application platforms
- Ethernet communications

CM182-PVP FEATURE SUMMARY

- Comprehensive Courseware
- Allen-Bradley Panelview Plus HMI
- Large screen visualization using 10 inch touch activated colored display screen
- Allen-Bradley's easy-to-use industry-based HMI software
- Built-in Ethernet connectivity
- On-board auxiliary switches and lights for machine and process control demonstrations
- Easy interfacing to external devices via universal banana jack/patchcord electrical connections

Trainer Dimensions: 16 in. W x 16 in. H x 13 in. D
Shipping Weight: 40 lbs.