

L1/C1 Automation Panels



 Cannon Automata

PARTNER IN AUTOMATION

L1 - Automation Panels

Elegant and universal - the ideal multi-touch panels for demanding visualization and control systems

- Display sizes from 15,6" to 21,5"
- Landscape or portrait mounting
- Front-USB and integrated RFID reader/writer



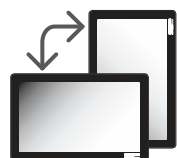
The L1 multi-touch panels open up new possibilities for designing intuitive user interfaces. The multi-finger touch sensor enables the use of gestures well-known from smartphones and tablet computers. This simplifies the interaction of the operator with the machine.

The extremely flat display modules with anti-reflective front can be mounted in landscape or portrait mode. The aluminum case impresses with its high-quality workmanship and, in spite of the elegant design, provides the necessary robustness for usage in industrial environments.

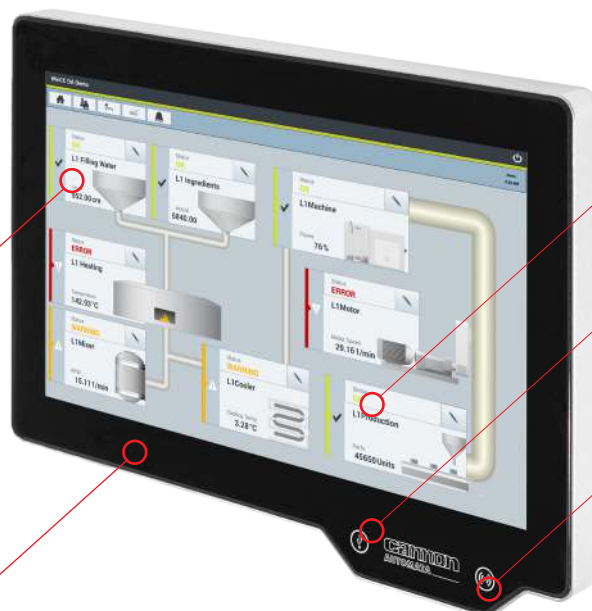
▶▶ L1 display modules are available in various sizes from 15.6" to 21.5". They are equipped with a front-side USB port with protection class IP65 and have an integrated RFID reader/writer.



PCAP multi-touch



2 mounting directions



3 display sizes (15.6", 18.5" and 21.5")

USB with protection class IP65

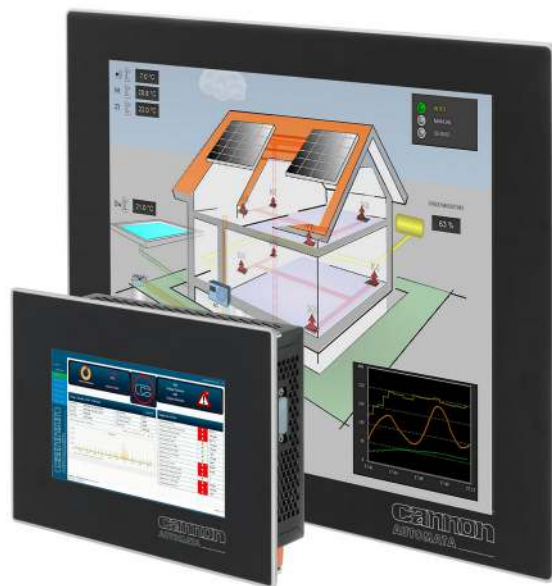


RFID reader/writer

C1 - Automation Panels

Proven and innovative - C1 panels combine innovative PCAP multi-touch technology and widescreen displays with proven resistive touch-screens in 4:3 display format

- PCAP multi-touch or resistive single-touch
- 16:9 or 4:3 display format
- 7 display sizes



C1 automation panels are particularly suitable for applications that must be compatible with existing graphical user interfaces. Existing applications with a 4:3 screen format and single-touch based user interface can be operated without any software adjustments.

Thanks to the also available 16:9 format and modern PCAP multi-touch technology, future-proofness is guaranteed. This makes it even possible to switch to innovative user interfaces with gesture control within the system with little effort.

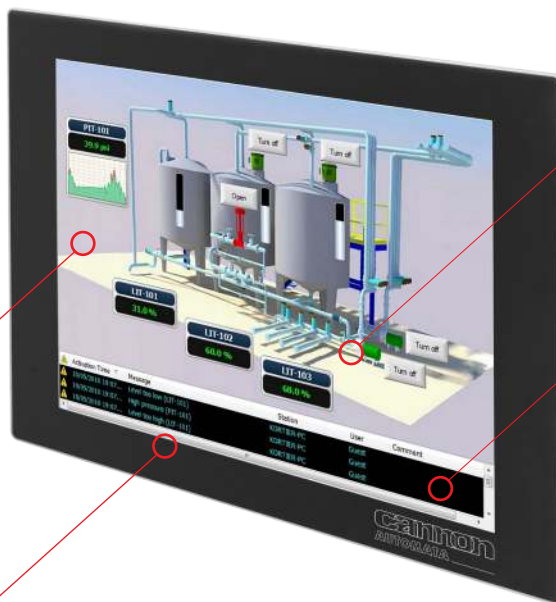
>>> C1 display modules are available in 4:3 and 16:9 format with display sizes from 7" to 24". In addition to panels with innovative PCAP multi-touch technology, also variants with resistive single-touch are available.



resistive single-touch or PCAP multi-touch



2 mounting directions



5 display sizes in 16:9 format (7", 10.1", 15.6", 21.5" and 24")



2 display sizes in 4:3 format (12.1" and 19")



The L1/C1 automation panels are modular. The display unit and the system unit are independent modules, which are connected to each other via a standardized mechanical and electrical interface. This structure gives the panels special flexibility and ensures a wide range of possible combinations and applications.

Panel-PC

The PC system units xC H and xC L make the L1/C1 panels high-quality Panel-PCs with Intel Celeron or Core-i CPUs. They are suitable for the realization of graphical user interfaces and as a hardware platform for SCADA systems.

Web-Panel

Linux, web browser and Java in combination with xC L-, xK or xE system units are the basis for the use of L1/C1 devices as a Web-Panel. The Web browser supports HTML5 and Java and is optimized for communication with the CODESYS WebVisu. They are particularly suitable for operation on A2-PAC, K1 or E1 controllers, but can also communicate with any other controllers with integrated web server (e.g. Beckhoff, WAGO).

CODESYS Touch-PLC

Combined with xA, xK or xE system units, L1/C1 panels are operator panels with integrated PLC. The control units are equipped with onboard IOs, EtherCAT or Sercos master as well as a CAN interface. PLC and visualization are programmed with CODESYS. The integrated OPC-UA server allows ERP, MES and SCADA systems the access to application data and serves as an interface for M2M communication.



C/C++

OPC UA



HTML



Remote-Panel

The xF and xD system units are ideal for use on extended or modular machines as alternative to expensive and difficult to handle Thin-Client solutions. They allow to span distances between panel and PC of up to 100 meter via a single cable.

Monitor

The xM system unit allows to connect the L1/C1 panels to PCs with DVI/HDMI interface for video and USB for the touch-screen.



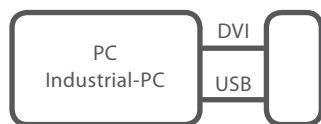
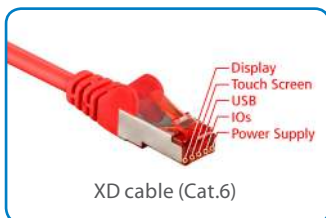
The xD system unit enables remote operation of the L1/C1 panels connected to the A2-PAC controller. Video, touch-screen, USB, IO and power supply are transmitted over a single, up to 100 meter long standard Cat.6 cable.

The XD transmitter box allows to connect L1/C1 panels to standard or industrial PCs.



A2-PAC with XD panel interface

XD panel interface (up to 100 meter)



XD transmitter box

XD panel interface (up to 100 meter)



System units

The system units guarantee versatility and flexibility. The unified mechanical and electrical interface between display and system unit ensures unlimited combination possibilities and the optimal configuration for a wide range of applications.

- Panel-PC
- Web-Panel
- CODESYS Touch-PLC
- Remote-Panel
- Monitor




xCH
Intel® Core™-i3 to -i7 CPU
mSATA and RAID controller
Mini-PCle slot



xCL
Intel® Celeron (J1900/N2930/N2920)
mSATA
Mini-PCle slot




xK/xE
ARM® Cortex®-A9 multi-core CPU
CAN, Mini-PCle or M.2 slot
CODESYS V3



xA
Intel® Atom™ to Core™-i CPU
EtherCAT® or Sercos® master
CAN, CODESYS V3



xF
Video, touch-screen, USB and
power supply in a single, up to 5
meter long standard DVI cable



xM
DVI and HDMI input
integrated USB hub
OSD



xD
Video, touch-screen, USB, IO and
power supply in a single, up to 100
meter long Cat.6 cable






Technical Information	L1 display units			C1 display units						
	16:9 display format			16:9 display format					4:3 display format	
	15,6"	18,5"	21,5"	7"	10.1"	15,6"	21,5"	24"	12,1"	19"
Dimension (W x H x D mm)	406 x 281 x 25	473 x 320 x 25	538 x 357 x 25	197 x 135	259 x 176	401 x 256	538 x 357	672 x 404	320 x 250	478 x 384
Resolution	1366x768	1366x768	1920x1080	800x480	1280x800	1366x768	1920x1080	1920x1080	800x600	1280x1024
Touch screen	PCAP multi-finger touch sensor			PCAP multi-finger touch sensor or resistiv single-touch sensor						
Housing	aluminium			metal						
Mounting	wallmount (landscape or portrait)			built-in (landscape or portrait)						
Interfaces (front)	1 x USB, 1 x RFID-Reader/Writer (optional, integrated into the front)			-						
Interfaces (rear side)	(depending on the mounted system unit)									
Power supply	24VDC over system unit									
Protection class	IP65 (front)									

System units	Kombinationsmöglichkeiten									
xCH (Panel-PC)	•	•	•	x	•	•	•	•	•	•
xCL (Panel-PC, Web-Panel)						•				
xA (CODESYS Touch-PLC)						•				
xK, xE (CODESYS Touch-PLC, Web-Panel)						•				
xD (Remote-Panel, up to 100 meter)						•				
xF (Remote-Panel, up to 5 meter)	•	•	x	•	•	•	•	•	•	•
xM (Monitor)						•				

PRODUCTS

Technological components for industrial automation.

- ✓ PAC - PROGRAMMABLE AUTOMATION CONTROLLER
- ✓ I/O MODULES
- ✓ AUTOMATION SOFTWARE

- ✓ FIELDBUS & INDUSTRIAL ETHERNET
- ✓ HMI - HUMAN MACHINE INTERFACE
- ✓ DRIVES

APPLICATIONS

Hardware and software solutions for specific user applications.








- ✓ REMOTE MONITORING & ASSISTANCE
- ✓ ENVIRONMENTAL MONITORING
- ✓ PREVENTIVE MAINTENANCE

- ✓ MACHINE CONTROL & PRODUCTION
- ✓ MOTION & ROBOTICS
- ✓ ENERGY EFFICIENCY

ENGINEERING

Services for engineering projects.

35 years of experience in the automotive, energy, oil & gas and water treatment sectors enable Cannon Automata to present itself as complete and perfect partner for the development of industrial engineering and process projects. Systems are characterized by their high performance, thanks to an approach that is fully oriented to achieve tailored solutions to specific needs.

For the best results in terms of quality and customer satisfaction, Cannon-Automata follows an operative scheme that is widely experienced and successful, from the study to the implementation, and with a constant technical support.

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