

LP30 / LP31

Entry Level PAC



LP30/31 systems are the only ARM-based Panel PACs - Programmable Automation Controllers - on the market combining visualisation, control and remote assistance functions. On Windows Embedded Compact 7 Pro, they integrate the numerous and advanced features of PHMI4 visualization software, in Basic or Advanced versions, CODESYS SoftPLC 3.5 and ASEM UBIQUITY. LP30/31 Panel PAC family is characterised by a wide range of 16 million colors LED backlight TFT LCD sizes with

Aluminium or Aluminium True Flat front panels. Available with 5.7", 8.4", 10.4", 12.1" and 15" LCD sizes in 4:3 aspect ratio and with 7" and 15.6" LCD sizes in 16:9 aspect ratio. LP30/31 systems are based on a motherboard with an ARM Cortex A8 1 GHz/800 MHz processor (Freescale i.MX535 or Freescale i.MX537) and the ASEM Smart Memory System, with 512 MB system Ram (DDR3-800), 256 MB Nand-Flash, write-protected, for the operating system and Runtime of PHMI4

and CODESYS SoftPLC, a 2 GB eMMC memory for management and storage of HMI project data and a slot for a removable SDHC memory card. The motherboard has also an RS-232/422/485 configurable serial port with MPI support, two USB 2.0 interfaces and two Ethernet interfaces 10/100 and 100 Mbps. LP31 has also a CAN interface.



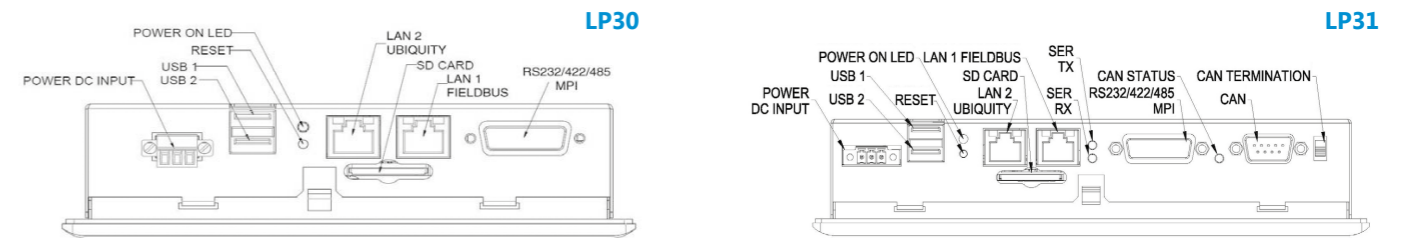
Highlights

- CODESYS SoftPLC for control applications with retentive data management via MicroUPS
- EtherCAT, Modbus TCP/IP, Modbus RTU and CANopen fieldbuses
- Premium HMI 4 visualisation software
- Ubiquity Remote Assistance Software with remote access to the system and to Ethernet and Serial sub-networks
- ARM Cortex A8 (1 GHz processor - LP30, 800 MHz processor - LP31)
- ASEM Smart memory system
- 5.7", 8.4", 10.4", 12.1", 15" displays in 4:3 aspect ratio, 10.1" and 12.1" displays in 16:10 aspect ratio, and 7" and 15.6" displays in 16:9 aspect ratio
- Front panel in Aluminium or Aluminium True Flat
- IP66 front degree of protection - Enclosure type 4X (Indoor use only)
- Operating temperature 0°C ÷ +50°C
- UL 508 listed component
- ATEX approval Zone 2/22 (only LP30)

Gallery



I/O shield



Technical data

	LP30	LP30-TF	LP31	LP31-TF
CONTROL SOFTWARE	CODESYS SP v3.x			
supported protocols	EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master		EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master, CANopen Master	
HMI Software	PREMIUM HMI 4 BASIC / ADVANCED			
REMOTE ASSISTANCE SW	ASEM UBIQUITY PRO			
OS INSTALLED	Microsoft Windows Embedded Compact 7 Pro			
LED backlight TFT LCD	5.7" - 640x480 7" W - 800x480 8.4" - 800x600 10.1" W - 1280x800 10.4" - 800x600 12.1" W - 1280x800 12.1" - 800x600 / 1024x768 15.0" - 1024x768 15.6" W - 1366x768		7" W - 800x480 8.4" - 800x600 10.1" W - 1280x800 10.4" - 800x600 12.1" W - 1280x800 12.1" - 800x600 / 1024x768 15.0" - 1024x768 15.6" W - 1366x768	
TOUCHSCREEN	Resistive 4 wires for 5.7" and 7" Resistive 5 wires for other sizes			
FRONT PANEL	Aluminium	True Flat Aluminium	Aluminium	True Flat Aluminium
PROTECTION GRADE	IP66, Enclosure type 4x - front			
PROCESSOR	ARM Cortex A8 processor Freescale® i.MX535 1 GHz		ARM Cortex A8 processor Freescale® i.MX537 800 MHz	
SYSTEM MEMORY - RAM	1 GB			
MASS STORAGE	256 MB Read-Only NAND-Flash for operating system and runtime 4 GB eMMC (Solid State Disk) 8bit, file system organization for projects and applications 1 x Slot SD/SDHC v2.0			
LAN	LAN1 Ethernet 100 Mbps (RJ45) LAN2 Ethernet 10/100 Mbps (RJ45)			
USB	2 x USB 2.0 (Type A, rear)			
SERIAL	1 x RS-232/422/485 (DB15M)			
FIELDBUS INTERFACES	-		1 x CAN isolated channel (DB9M) with FlexCAN integrated controller	
POWER SUPPLY UNIT	24VDC		24VDC isolated	
OPERATING TEMPERATURE	Backup for microinterruption, max 500ms, with supercapacitors 0° - 50°C			
APPROVALS	CE, cULus LISTED (508), ATEX zone 22, 11 3 D	CE, cULus LISTED (508), ATEX zone 2/22, 11 3 G D	CE, cULus LISTED (508)	