



Industrial Automation - Products & Configurations

LP30 BASIC
Basic configuration > note 1

Basic configuration	LCD TFT 5,7" • Touch-Screen • Aluminum front panel • ARM Cortex A8, 1 GHz • 1 GB RAM • 256 MB NAND-Flash • 4GB eMMC • fanless • 24V DC power supply with backup for microinterruption function • Windows WEC • SoftPLC CODESYS SP v3,x WinCE/ARM • Premium HMI 4 BASIC WinCE runtime • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • 12 months warranty
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SoftPLC	SoftPLC CODESYS SP v3.x for WinCE/ARM runtime Protocols: EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master Retentive variables: Automatic backup of retentive variables on eMMC at every system switch-off and/or power supply interruption	↓
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HMI SOFTWARE	Premium HMI 4 BASIC WinCE runtime Premium HMI 4 ADVANCED WinCE runtime	↓
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REMOTE ASSISTANCE	ASEM UBIQUITY PRO WinCE runtime	↓
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FRONT PANEL	Aluminum front panel • ASEM logo sticker	↓
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PROCESSOR	ARM Cortex A8 processor • Freescale i.MX535 • 1 GHz • 400Mhz memory bus • Soldered on board	↓
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DISPLAY & TOUCH-SCREEN	5,7" LCD TFT 4:3 • VGA, 640x480, 256K colors • backlight LED 500 cd/m2 • Viewing angle L:R/U:L (typ.): 70°:70°/45°:55°	no	↓
	5,7" touch-screen • 4 wires resistive technology • Controller integrated on board		
	7" LCD TFT 15:9 • WVGA, 800x480, 16M colors • backlight LED 500 cd/m2 • Viewing angle L:R/U:L (typ.): 70°:70°/70°:60°	no	↓
	7" WIDE touch-screen • 4 wires resistive technology • Controller integrated on board		
	8,4" LCD TFT 4:3 • SVGA, 800x600, 256K colors • backlight LED, 350 cd/m2 • Viewing angle L:R/U:L (typ.): 75°:75°/60°:70°	no	↓
	8,4" touch-screen • 5 wires resistive technology • Controller integrated on board		
	10,4" LCD TFT 4:3 • SVGA, 800x600, 16M colors • backlight LED, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/60°:80°	no	↓
	10,4" touch-screen • 5 wires resistive technology • Controller integrated on board		
	12,1" LCD TFT 4:3 • SVGA, 800x600, 16M colors • backlight LED, 500 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/80°:60°	yes	↓
	12,1" touch-screen • 5 wires resistive technology • Controller integrated on board		
	12,1" LCD TFT 4:3 • XGA, 1024x768, 16M colors • backlight LED, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70°	yes	↓
	12,1" touch-screen • 5 wires resistive technology • Controller integrated on board		
	15" LCD TFT 4:3 • XGA, 1024x768, 16M colors • backlight LED, 450 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70°	yes	↓
	15" touch-screen • 5 wires resistive technology • Controller integrated on board		
15,6" LCD TFT 16:9 • 1366x768 (HD), 16M colors • backlight LED, 300 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/80°:80°	no	↓	
15,6" touch-screen • 5 wires resistive technology • Controller integrated on board			

WARRANTY	12 months on system and its variants	↓
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OPTIONS

WARRANTY EXTENSION	Warranty extension to 18 months on basic system and its variants	↓
	Warranty extension to 24 months on basic system and its variants	↓
	Warranty extension to 36 months on basic system and its variants	↓

NOTES
<p>1: Price does not include Premium HMI Studio 2014 development tool licence that must be purchased one-off at the first order of a license or system that includes the Premium HMI software. See pg.163</p> <p>Price does not include ASEM UBIQUITY DOMAIN that must be purchased one-off at the first order of a license or system that includes the UBIQUITY runtime. See pg.162</p> <p>2: Glass Film Glass (GFG) Touch-Screen option: see pg.167 for differences with standard Touch-Screen configuration.</p>


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LP30 / LP30-TF

Technical Specifications

CODESYS SoftPLC WinCE/ARM for LP30 main features	
PLC programming	IEC61131-3, CODESYS SP v3.x
Supported protocols	EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master
Variables backup	Retentive 64Kbyte
	Persistent 64Kbyte
	Management Automatic backup of retentive variables on eMMC at every system switch-off and/or power supply interruption
Main performances	Cycle time ≥ 10 ms
	Jitter ± 2 ms
	Fieldbus Only one, no gateway admitted

For CODESYS SP details, see pg.166

Premium HMI 4 runtimes differences	BASIC	ADVANCED
I/O Bytes (Tags)	1.024	4.096
Alarms	512	2.048
Data Loggers on SQL Database for CE	Max 2	Unlimited
Multi-Drivers	Max 2	Max 4
SMS/E-mails		✓
Web Server		Max 2 clients connected

For Premium HMI 4 details, see pg.163

ASEM UBIQUITY PRO main features
Control Center software for access and management of services with user friendly interface and complete devices management
User profile with fine control of permissions
Remote desktop, file&task management, chat, screenshot
VPN with access to the Ethernet subnetwork of the remote device and serial passthrough support
Multiple connection from different Control Center by separated VPN for each client
Audit and usage statistics
Internet connection with PROXY
High security standards with usage of unique certificates and encrypted connections
Integrated firewall
Quality measurement of Internet connection with automatic selection of the best connectivity condition
Runtime update procedure with automatic shutdown and restart of the services
Ethernet-MPI gateway for remote assistance on devices with MPI interface

For ASEM UBIQUITY details, see pg.162

ASM (ASEM System Manager). Control Panel utilities
Backup&Restore - Complete system cloning or selective backup and restore of the installed softwares
Screensaver - Display brightness control or display switch off after an inactivity period
Antialiasing - Softens the characters matrix

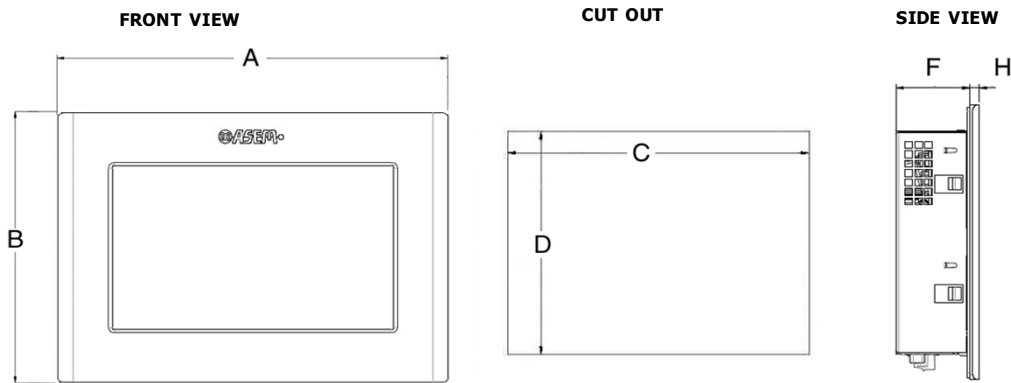
TECHNICAL SPECIFICATIONS	
Case	Panel mount
Overall dimensions & weight	See details on the related section
Front Panel	LP30 Aluminum • ASEM logo sticker
	LP30-TF Aluminum TrueFlat • Polycarbonate Pantone Cool Grey 4C color • ASEM logo serigraph printed
Touchscreen	LP30 4/5 wires resistive technology
	LP30-TF 4/5 wires resistive technology • overlaminated with OCA (Optical Clear Adhesive)
Frontal protection	IP66, Enclosure type 4X (Indoor use only)
Operating System	Microsoft Windows Embedded Compact 7 Pro license with Microsoft olographic sticker
Software	HMI Premium HMI 4 WinCE BASIC / ADVANCED runtime license with ASEM sticker
	Control SoftPLC CODESYS SP v3.x for WinCE/ARM runtime • license with 3S sticker
	Remote assistance ASEM UBIQUITY WinCE PRO runtime license with ASEM sticker
	Utility ASEM System Manager • Backup&Restore, Screensaver, Antialiasing
Power supply	Input voltage 18÷36V DC • Power supply section integrated on board
	optional Backup for microinterruption with supercapacitors • Max interruption: 500ms • First load: 6' • Rearm time: 90"
Motherboard	"All-In-One" type • ASEM R131
Processor	ARM Cortex A8 • Freescale i.MX535 • 1 GHz, 400 MHz system memory bus • Soldered on board • GPU (Graphic Processor Unit) integrated
RAM memory	1GB DDR3-800 • Soldered on board
Mass storage	NAND-Flash 256MB Read-Only • for operating system and runtime
	eMMC (Solid State Disk) 4GB, 8bit, file system organization • for projects and applications
SD slot	1 x Slot SD/SDHC v2.0 integrated on board • external access
Rear access interfaces	LAN1 Ethernet 100 Mbps (RJ45) • LAN2 Ethernet 10/100 Mbps (RJ45) • 2 x USB 2.0 (Type-A / host)
Rear access serial interfaces	1 x RS-232/422/485 (DB15M)
Environmental specifications	Operating temperature: 0° ÷ +50°C • Storage temperature: -20° ÷ +60°C • Humidity: 80% (non-condensing)
Approvals	CE (EN 55022, EN 61000-3-2/3, EN 55024, EN 60950-1) • cULus (508)
Standard warranty	12 months • Warranty management by ASEM headquarters



LP30 / LP30-TF

Technical Specifications

DIMENSIONS (mm)



LP30

LCD TFT	A	B	C	D	H	F	Weight (Kg)
5,7"	175	145	164	134	5	40	0,9
7"W	215	155	204	144	5	40	1,2
8,4"	255	190	243	179	5	48,5	1,4
10,4"	295	230	283	219	5	48,5	1,8
12,1"	325	260	313	249	5	48,5	2,1
15"	390	305	378	294	6	48,5	3,3
15,6"	420	265	410	255	6	48,5	3,3

LP30-TF

LCD TFT	A	B	C	D	H	F	Weight (Kg)
5,7"	175	145	164	134	4	40	0,9
7"W	215	155	204	144	4	40	1,2
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10,4"	295	230	283	219	5	48,5	1,8
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15"	390	305	378	294	6	48,5	3,3
15,6"	420	265	410	255	6	48,5	3,3

CONNECTORS VIEW (5,7")

