

Industrial Automation - Products & Configurations

HMI40 BASIC			POWER [W]
Basic configuration > note 1			
Basic configuration		LCD TFT 7" • Touch-Screen • ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1 GB RAM • 4GB eMMC Pseudo-SLC • fanless • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • Premium HMI WinCE BASIC runtime • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • Aluminum front panel • 12 months warranty	10
HMI SOFTWARE	A	B	
	•	•	Premium HMI WinCE BASIC runtime
	•	•	Premium HMI ADVANCED WinCE runtime
REMOTE ASSISTANCE	•	•	ASEM UBIQUITY PRO WinCE runtime
FRONT PANEL	•	•	Aluminum front panel • ASEM logo sticker
PROCESSOR	•	•	ARM Cortex A9 dual core processor • i.MX6 DualLite • 1 GHz • 400Mhz memory bus • Soldered on board
DISPLAY & TOUCH-SCREEN	•	•	7" LCD TFT 15:9 • WVGA, 800x480, 16M colors • backlight LED 500 cd/m2 • Viewing angle L:R/U:L (typ.): 70°:70°/60°:60°
	•	•	7" WIDE touch-screen • 4 wires resistive technology • Controller integrated on board
	•	•	8,4" LCD TFT 4:3 • SVGA, 800x600, 256K colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/80°:80°
	•	•	8,4" touch-screen • 5 wires resistive technology • Controller integrated on board
	•	•	10,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400cd/m2 • Viewing angle L:R/U:L (typ.): 88°:88°/88°:88°
	•	•	10,1" W Touch-Screen 16:10 • 5 wires resistive technology • Controller integrated on board
	•	•	10,4" LCD TFT 4:3 • SVGA, 800x600, 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70°
	•	•	10,4" Touch-Screen 4:3 • 5 wires resistive technology • Controller integrated on board
	•	•	12,1" LCD TFT 4:3 • SVGA, 800x600, 16M colors • LED backlight, 450 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/65°:75°
	•	•	12,1" touch-screen • 5 wires resistive technology • Controller integrated on board
	•	•	12,1" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70°
	•	•	12,1" touch-screen • 5 wires resistive technology • Controller integrated on board
	•	•	12,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 88°:88°/88°:88°
	•	•	12,1" W Touch-Screen 16:10 • 5 wires resistive technology • Controller integrated on board
	•	•	15" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 500 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/85°:85°
	•	•	15" Touch-Screen 4:3 • 5 wires resistive technology • Controller integrated on board
	•	•	15,6" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/80°:80°
	•	•	15,6" W Touch-Screen 16:9 • 5 wires resistive technology • Controller integrated on board
WARRANTY	•	•	12 months

OPTIONS			POWER [W]
MPI	•	•	Adapter cable from DB15F to DB9F (MPI/PPI)
COMMUNICATION PORTS	•	•	1 x RS-485 (DB9M) isolated with terminations • Without MPI protocol support > note 2
WIFI & MODEM	•	•	IEEE 802.11b/g/n WiFi module, 2,4GHz • 2G/3G/4G-LTE modem module > note 2,3
WARRANTY EXTENSION	•	•	Warranty extension to 18 month
	•	•	Warranty extension to 24 months
	•	•	Warranty extension to 36 months

NOTES	
The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports.	
1: Price does not include Premium HMI Studio 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.350	
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.347	
2: Options signed by note 2 cannot be installed together	
3: WiFi & modem modules are not compliant with the ATEX certification	

Industrial Automation - Products & Configurations

HMI40-TF BASIC			POWER [W]
Basic configuration > note 1			
Basic configuration	LCD TFT 7" • Touch-Screen • ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1 GB RAM • 4GB eMMC Pseudo-SLC • fanless • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • Premium HMI WinCE BASIC runtime • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • Aluminum TrueFlat front panel • 12 months warranty		10

HMI SOFTWARE	A	B		
	•	•		
	•	•	Premium HMI WinCE BASIC runtime	-
	•	•	Premium HMI ADVANCED WinCE runtime	-

REMOTE ASSISTANCE	•	•	ASEM UBIQUITY PRO WinCE runtime	-
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FRONT PANEL	•	•	Aluminum TrueFlat front panel with touch-screen overlaminated with OCA (Optical Clear Adhesive) • ASEM logo serigraph printed	-
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PROCESSOR	•	•	ARM Cortex A9 dual core processor • i.MX6 DualLite • 1 GHz • 400Mhz memory bus • Soldered on board	
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DISPLAY & TOUCH-SCREEN	•	•	7" LCD TFT 15:9 • WVGA, 800x480, 16M colors • backlight LED 500 cd/m2 • Viewing angle L:R/U:L (typ.): 70°:70°/60°:60° 7" WIDE touch-screen • 4 wires resistive technology • Controller integrated on board	
	•	•	8,4" LCD TFT 4:3 • SVGA, 800x600, 256K colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/80°:80° 8,4" touch-screen • 5 wires resistive technology • Controller integrated on board	- 0
	•	•	10,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400cd/m2 • Viewing angle L:R/U:L (typ.): 88°:88°/88°:88° 10,1" W Touch-Screen 16:10 • 5 wires resistive technology • Controller integrated on board	+ 2
	•	•	10,4" LCD TFT 4:3 • SVGA, 800x600, 16M colors • LED backlight , 400 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/70°:70° 10,4" Touch-Screen 4:3 • 5 wires resistive technology • Controller integrated on board	+ 2
	•	•	12,1" LCD TFT 4:3 • SVGA, 800x600, 16M colors • LED backlight, 450 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/65°:75° 12,1" touch-screen • 5 wires resistive technology • Controller integrated on board	+ 4
	•	•	12,1" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70° 12,1" touch-screen • 5 wires resistive technology • Controller integrated on board	+ 11
	•	•	12,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ): 88°:88°/88°:88° 12,1" W Touch-Screen 16:10 • 5 wires resistive technology • Controller integrated on board	+ 7
	•	•	15" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 500 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/85°:85° 15" Touch-Screen 4:3 • 5 wires resistive technology • Controller integrated on board	+ 13
	•	•	15,6" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ): 85°:85°/80°:80° 15,6" W Touch-Screen 16:9 • 5 wires resistive technology • Controller integrated on board	+ 8

WARRANTY	•	•	12 months	-
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OPTIONS			POWER [W]
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MPI	•	•	Adapter cable from DB15F to DB9F (MPI/PPI)	
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COMMUNICATION PORTS	•	•	1 x RS-485 (DB9M) isolated with terminations • Without MPI protocol support > note 2	+ 1
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WIFI & MODEM	•	•	IEEE 802.11b/g/n WIFI module, 2,4GHz • 2G/3G/4G-LTE modem module > note 2,3	-
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WARRANTY EXTENSION	•	•	Warranty extension to 18 month	-
	•	•	Warranty extension to 24 months	-
	•	•	Warranty extension to 36 months	-

NOTES				
The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports.				
1:	Price does not include Premium HMI Studio 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.350 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.347			
2:	Options signed by note 2 cannot be installed together			
3:	WiFi & modem modules are not compliant with the ATEX certification			



HMI40-TFM

fanless

Industrial Automation - Products & Configurations

HMI40-TFM BASIC				POWER [W]	
Basic configuration > note 1					
Basic configuration		LCD TFT 7" W • P-CAP projected capacitive multitouch Touch-Screen • ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1 GB RAM • 4GB eMMC Pseudo-SLC • fanless • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • Premium HMI WinCE BASIC runtime • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • Aluminum and tempered glass TrueFlat front panel • 12 months warranty			10
HMI SOFTWARE	A	B		↓	
	•	•	Premium HMI WinCE BASIC runtime		-
REMOTE ASSISTANCE	•	•	Premium HMI ADVANCED WinCE runtime		-
	•	•	ASEM UBIQUITY PRO WinCE runtime	↓	
FRONT PANEL	•	•	Aluminum and glass TrueFlat front panel with P-CAP projected capacitive touch-screen		-
	•	•		↓	
PROCESSOR	•	•	ARM Cortex A9 dual core processor • i.MX6 DualLite • 1 GHz • 400Mhz memory bus • Soldered on board		
	•	•		↓	
DISPLAY & TOUCH-SCREEN	•	•	7" LCD TFT 15:9 • WVGA, 800x480, 16M colors • backlight LED 500 cd/m2 • Viewing angle L:R/U:L (typ.): 70°:70°/60°:60°		
	•	•	7" W Touch-Screen 15:9 • P-CAP projected capacitive multitouch touchscreen		
	•	•	10,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400cd/m2 • Viewing angle L:R/U:L (typ.): 88°:88°/88°:88°		+ 2
	•	•	10,1" W Touch-Screen 16:10 • P-CAP projected capacitive multitouch touchscreen		
	•	•	12,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ): 88°:88°/88°:88°		+ 7
	•	•	12,1" W Touch-Screen 16:10 • P-CAP projected capacitive multitouch touchscreen		
WARRANTY	•	•	15,6" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ): 85°:85°/80°:80°		+ 8
	•	•	15,6" W Touch-Screen 16:9 • P-CAP projected capacitive multitouch touchscreen	↓	
WARRANTY	•	•	12 months		-
	•	•			

OPTIONS					
				↓	
MPI	•	•	Adapter cable from DB15F to DB9F (MPI/PPI)		
COMMUNICATION PORTS	•	•	1 x RS-485 (DB9M) isolated with terminations • Without MPI protocol support > note 2		+ 1
WIFI & MODEM	•	•	IEEE 802.11b/g/n WiFi module, 2,4GHz • 2G/3G/4G-LTE modem module > note 2,3		-
WARRANTY EXTENSION	•	•	Warranty extension to 18 month	↓	
	•	•	Warranty extension to 24 months		
	•	•	Warranty extension to 36 months		

NOTES	
1:	The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports. Price does not include Premium HMI Studio 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.350 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.347
2:	Options signed by note 2 cannot be installed together
3:	WiFi & modem modules are not compliant with the ATEX certification



HMI40 family

Technical Specifications

Industrial Automation - Products & Configurations

Premium HMI runtimes differences	BASIC	ADVANCED
RealTime DB (max, byte)	1.024	8.192
Alarms (max)	1.024	4.096
Recipes / Data Logger (ODBC)	Max 2	Unlimited
Communication drivers	Max 2	Max 4
Alarm notification (SMS, E-Mail)		✓
SMS notification via SMPP protocol		SMS using Internet gateway
Web Clients		Max 4 clients connected
Premium HMI Mobile		✓

For Premium HMI details, see pg.350

ASEM UBIQUITY PRO main features

Control Center application to access the service with intuitive and ergonomic user interface for a comprehensive machine park management

Optimized VPN with access limited to the remote device with Ubiquity Runtime

Optimized VPN with entire access to the complete remote device sub-network and serial passthrough

For ASEM UBIQUITY details, see pg.347

ASM (ASEM System Manager). Control Panel utilities

Backup&Restore - Complete system cloning or selective backup and restore of the installed softwares

Antialiasing - Softens the characters matrix

Screensaver - Display brightness control or display switch off after an inactivity period

Touch Buzzer - Enable touch sound-feedback

eMMC Usage - Check the eMMC memory usage and evaluate the expected endurance

Kiosk Mode - Hide the O.S. explorer interface and run PHMI runtime in 'kiosk' mode

Language Settings - Easy installation of not european languages characters in HMI applications

Scrollbar - Allows to change the scrollbars sizes

System reboot - Reboot the system without switching off the power supply

TECHNICAL SPECIFICATIONS

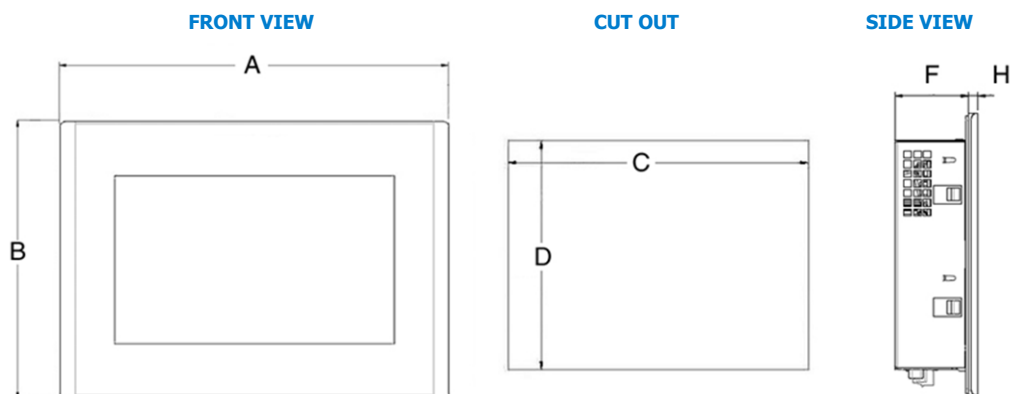
Case	Panel mount
Overall dimensions & weight	See details on the related section
Front Panel	HMI40 Aluminum • ASEM logo sticker
	HMI40-TF Aluminum TrueFlat • Polycarbonate Pantone Cool Grey 4C color • ASEM logo serigraph printed
	HMI40-TFM Aluminum and tempered glass TrueFlat
Touchscreen	HMI40 4/5 wires resistive technology
	HMI40-TF 4/5 wires resistive technology • overlaminated with OCA (Optical Clear Adhesive)
	HMI40-TFM projective capacitive touch-screen
Frontal protection	IP66, Enclosure type 4X (Indoor use only)
Operating System	Microsoft Windows Embedded Compact 7 Pro license with Datalight Reliance Nitro file system • Microsoft olographic sticker
Software	HMI Premium HMI WinCE BASIC / ADVANCED runtime license
Remote assistance	ASEM UBIQUITY WinCE PRO runtime license with ASEM sticker
Utility	ASEM System Manager
Power supply	Input voltage 18÷36V DC • Isolated power supply section integrated on board
Motherboard	"All-In-One" type • ASEM R231
Processor	ARM Cortex A9 dual core • i.MX6 DualLite • 1 GHz, 400 MHz system memory bus • GPU (Graphic Processor Unit) integrated
RAM memory	1 GB DDR3-800 • Soldered on board
Mass storage	eMMC (Solid State Disk) 4GB Pseudo-SLC, 8bit, file system organization • for projects and applications
SD slot	1 x Slot MicroSD integrated on board • external access
Rear access interfaces	2 x Ethernet 10/100/1000 Mbps (RJ45) • 2 x USB 2.0 (Type-A / host)
Rear access serial interfaces	1 x RS-232/422/485 (DB15M) with MPI protocol support up to 187,5Kbit/s • Optional 1 x RS-485 isolated (DB9M) without MPI protocol support
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 LISTED (61010) • HMI40: ATEX 2014/34/UE Zone 22 II 3 D (only without WiFi & modem modules) HMI40-TF, HMI40-TFM: ATEX 2014/34/UE Zone 2/22 II 3 G D (only without WiFi & modem modules)
Standard warranty	12 months • Warranty management by ASEM headquarters



HMI40 family

Technical Specifications

DIMENSIONS (mm)



HMI40

CUT OUT "A"

CUT OUT "B"

LCD TFT	A	B	C	D	A	B	C	D	H	F	Weight (Kg)
7"W	215	155	204	144	204	147,6	197	140,5	5	40	1,2
8,4"	255	190	243	179	-	-	-	-	5	49	1,4
10,1"W	293	201,5	285	193,5	-	-	-	-	5	49	1,6
10,4"	295	230	283	219	-	-	-	-	5	49	1,8
12,1"	325	260	313	249	-	-	-	-	5	49	2,1
12,1"W	321	222,5	313	215	-	-	-	-	5	49	2,0
15"	390	305	378	294	-	-	-	-	6	49	3,3
15,6"W	420	265	410	255	-	-	-	-	6	49	3,3

HMI40-TF

CUT OUT "A"

CUT OUT "B"

LCD TFT	A	B	C	D	A	B	C	D	H	F	Weight (Kg)
7"W	215	155	204	144	204	147,6	197	140,5	4	40	1,2
8,4"	255	190	243	179	-	-	-	-	5	49	1,4
10,1"W	293	201,5	285	193,5	-	-	-	-	5	49	1,6
10,4"	295	230	283	219	-	-	-	-	5	49	1,8
12,1"	325	260	313	249	-	-	-	-	5	49	2,1
12,1"W	321	222,5	313	215	-	-	-	-	5	49	2,0
15"	390	305	378	294	-	-	-	-	6	49	3,3
15,6"W	420	265	410	255	-	-	-	-	6	49	3,3

HMI40-TFM

CUT OUT "A"

CUT OUT "B"

LCD TFT	A	B	C	D	A	B	C	D	H	F	Weight (Kg)
7"W	-	-	-	-	204	147,6	197	140,5	4	40	1,2
10,1"W	293	201,5	285	193,5	-	-	-	-	5	48	1,6
12,1"W	331	222,5	313	215	-	-	-	-	5	51	2,0
15,6"W	433	267	410	255	-	-	-	-	6	49	3,3

CONNECTORS VIEW

