

# XP Series

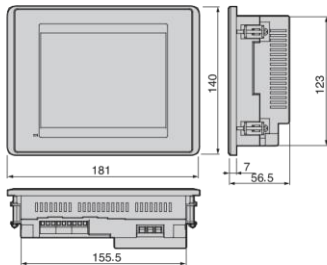
- 65,536 TFT color
- 4/10/20MB User memory, 128/512KB Backup memory
- Ethernet & serial communications support
- USB Host function to be used in various PC devices
- Up to 12 languages at a time and a batch-change of languages
- Offline simulations  
(Link to the XG5000 simulator)



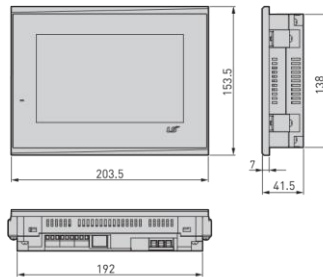
## Dimensions

[Unit: mm]

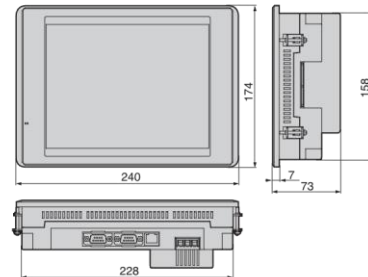
XP30-TTA/TTE



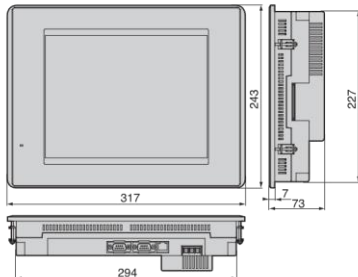
XP40-TTA/TTE (7" wide Type)



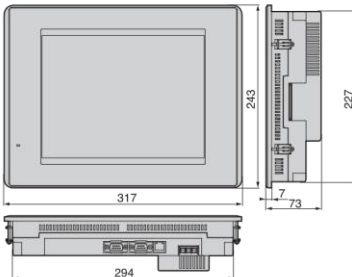
XP50-TTA



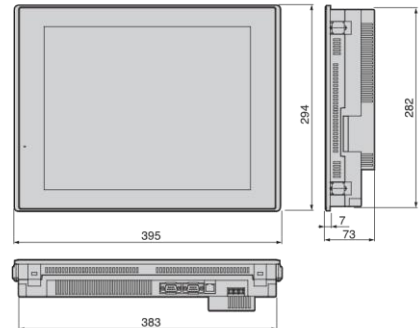
XP70-TTA



XP80-TTA



XP90-TTA



# General Information

No.	Item	Description	Standard	
1	Ambient temperature	0°C~+50°C		
2	Storage temperature	-20°C~+60°C		
3	Ambient humidity	10~85%RH, without dew condensation		
4	Storage humidity	10~85%RH, without dew condensation		
5	Vibration Resistance	-20°C~+60°C		Counts 10 times each direction (X, Y and Z)  IEC 61131-2
		Frequency	Amplitude	
		5 ≤ f < 9Hz	3.5mm	
		9 ≤ f ≤ 150Hz	-	
		Continuous Vibration		
		Frequency	Amplitude	
5 ≤ f < 9Hz	1.75mm			
9 ≤ f ≤ 150Hz	-			
6	Shock Resistance	Maximum shock acceleration: 147% $\{15g\}$ Authorization time: 11ms Pulse waveform: Half-sine wave pulse (3 times each of X,Y and Z)	IEC 61131-2	
7	Noise Resistance	Square wave impulse noise	AC: $\pm 1,500V$ DC: $\pm 1,000V$	LSIS Standards
		Electrostatic discharge	Voltage: 6 kV (Contact discharge)	IEC 61131-2, IEC 61000-4-2
		Radiated electromagnetic field noise	27 ~ 500MHz, 10V/m	IEC 61131-2, IEC 61000-4-3
		Fast transient/Burst noise	Power module: 2 kV, Communication interface: 1kV	IEC 61131-2, IEC 61000-4-4
8	Operating ambience	Free from corrosive gas and excessive dust		
9	Altitude	2,000m (6,562ft) or below		
10	Pollution degree	2 or under		
11	Cooling method	Natural air-cooling		

## Specifications

Model Type	XP30-BTE/DC	XP30-BTA/DC	XP30-TTE/DC	XP30-TTA/DC	XP40-TTE/DC	XP40-TTA/DC	XP50-TTA/DC	XP70-TTA/AC XP70-TTA/DC	XP80-TTA/AC XP80-TTA/DC	XP90-TTA/AC		
	Mono			Color								
Display Element	Mono Blue LCD			TFT color LCD								
Screen Size	14cm (5.7")				17.7cm (7")	21cm (8.4")	26cm (10.4")	31cm (12.1")	38cm (15")			
Resolution	320 x 240				800 x 480	640 x 480		800 x 600	1024 x 768			
Color	8-column Gray Scale	256 colors	65,536 colors	65,536 colors								
Backlight	LED mode						CCFL(can be replaced), Auto On/Off					
	50,000 hours			60,000 hours	30,000 hours	50,000 hours		60,000 hours				
Contrast	Adjustable			Fixed								
Brightness	230cd/m <sup>2</sup>			600cd/m <sup>2</sup>	280cd/m <sup>2</sup>	480cd/m <sup>2</sup>	430cd/m <sup>2</sup>	400cd/m <sup>2</sup>	450cd/m <sup>2</sup>			
Viewing Angle	Up/Down(Degree)	20/40	80/80	70/70	50/60	50/60	45/65	45/75	60/50			
	Left/Right(Degree)	45/45	80/80		65/65	65/65	65/65	65/65	75/75			
Touch Panel	4-wire system, analogue				Analog resistive		8-wire system, analogue					
Movement LED	Green: Normal RUN (Monitoring & drawing data download) Red: Error (Communication error & drawing data error)											
Memory	Screen Data	4MB	10MB	4MB	10MB	4MB	10MB	10MB		20MB		
	Backup Data	128KB	512KB	128KB	512KB	128KB		512KB				
Ethernet	-	1ch, 10/100Base-T	-	1ch, 10/100Base-T	-		1ch, 10/100Base-T					
USB Interface	USB Host x 1	USB Host x 2	USB Host x 1	USB Host x 2	USB Host x 1		USB Host x 2					
Serial	RS-232C	2ch(1 port for PC communication)										
	RS-422/485	1ch, 422/485 optional mode										
CF Card Interface	-	CF card (TAPE-1) x 1	-	CF card (TAPE-1) x 1	-		CF card (TAPE-1) x 1					
AUX Interface	-	Optional	-	Optional	-		Optional					
Certification	CE, UL(cUL), KC											
Protection	IP65 (Front Water Proof Structure)											
Size(W x H x D)mm	181 x 140 x 56.5	181 x 140 x 66.5	181 x 140 x 56.5	181 x 140 x 66.5	203.5 x 153.5 x 41.5		240 x 174 x 73	317 x 243 x 73		395 x 294 x 73		
Panel Cut (W x H)mm	155.0 x 123.5				192 x 138		228.5 x 158.5	294.5 x 227.5		383.5 x 282.5		
Weight (kg)	0.62	0.75	0.62	0.75	2.2	2.4	1.4	2.2	2.4	3.9		
Power	Rated Voltage	DC 24V							AC100~220V, DC 24V		AC100~220V	
	Permitted Voltage	AC	-							MIN 85 VAC, MAX 264 VAC		
		DC	MIN 19.2 VDC, MAX 28.8 VDC									
	Power Consumption (W)	AC	-							21.8	31.9	31.9
DC		9.7	16.9	9.6	17.4	9.8	9.8	18.7	20.1	25.7	-	

# Communication Protocols

Manufacturer	Protocol	Manufacturer	Protocol	
LSIS	GM CPU	KOYO Electronic	DirectNet	
	GM Cnet	KTURBO	Turbo Blower	
	GM Enet	Lenze Automation	Lecom A/B	
	MK CPU	Mitsubishi Electric	MELSEC A-CPU	
	MK Cnet		MELSEC A-Link	
	MK Enet		MELSEC FX-CPU	
	XGK CPU		MELSEC FX-Ethernet	
	XGK Cnet		MELSEC FX-Link	
	XGK Enet		MELSEC Q-CPU, "U" Type excluded	
	XGK EtherNet/IP		MELSEC QnA-Link	
	XGB CPU		MELSEC QnA-Ethernet	
	XGB Cnet		MELSEC QnU CPU Ethernet	
	XGB Enet		MELSERVO-J2	
	XGB EtherNet/IP		MELSERVO-J3	
	XGI/XGR CPU		OMRON	CS/CJ Series Ethernet
	XGI/XGR Cnet			CS/CJ Host Link
	XGI/XGR Enet	C Series Host Link		
	XGI/XGR EtherNet/IP	CS1 EthernNet/IP		
	XEC CPU	Panasonic Electric	CJ2 EthernNet/IP	
	XEC Cnet		FP Series	
	XEC Enet		MINAS Servo	
	XEC EtherNet/IP	Parker	Hi-Drive	
	Inverter LSBus	PROFIBUS International	PROFIBUS DP Slave *	
	Inverter Modbus	Rockwell Automation	Compact/ControlLogix EtherNet/IP	
	User Defined Protocol		MicroLogix EtherNet/IP	
User Defined Protocol (Slave)	SLC500 Series DF1			
XGT Servo	Compact/ControlLogix DF1			
			MicroLogix DF1	
LS Mecapion	VS/VP Servo Drive	RS Automation	N/NX-CCU	
	MXQ Series		NX-CCU+	
BACnet	IP Master	Schneider Electric	MODBUS RTU Master	
BYD Auto	BYD Auto dedicated		MODBUS RTU Slave	
CAN in Automation	CANopen Slave *		MODBUS TCP Master	
Control Techniques	CT Modbus RTU		MODBUS TCP Slave	
DAEWON GSI	DAEWON GSI dedicated controller		MODBUS ASCII Master	
Dasarobot	iM-SIGMA series		MODBUS ASCII Slave	
Delta Electronics	DVP Series		MOVIDRIVE Serial	
Digital Electronics(Pro-face)	Memory Link		S7 3964(R)/RK512	
Fuji Electric Systems	MICREX-SX Series SIO		S7 MPI(Adapter)	
	MICREX-SX Ethernet		S7 PPI	
GE Intelligent Platforms	SNP	LOGO Ethernet		
	SNP-X	S7 1200 Ethernet		
HANYOUNG NUX	Temperature Controller	S7 300/400 Ethernet		
HIGEN Motors	Servo	Sprint Electric	DC Motor Drive Ethernet	
Hitachi	H Series Ethernet		YASKAWA Electric	MEMOBUS RTU Master
	H Series Link	YOKOKAWA Electric		MP Series Ethernet (Extension)
HYUNDAI Elevator	SKY-RAV(Ethernet)		Beckhoff	FA-M3 Series
	SKY-RAV(Link)	FA-M3 Series-Ethernet		
KDT Systems	CIMON Serial Link	TSSI	ADS Ethernet	
	BP Series Loader		VERID+ FingerPrint Reader	
	CP Series Loader	FATEC Automation Corporation	FB Series Serial	
	XP Series Loader			
Keyence	KV-700/1000/3000/5000/5500 Serial			
	KV-700/1000/3000/5000/5500 Ethernet			