

SIMATIC HMI KP8 PN LX, 8 short-stroke switches long, PN interfaces, black neutral design, 8 configurable DI/DQ pins, 24 V DC can be looped through, parameterizable as of STEP 7 V5.5



General information	
Product type designation	Key Panel KP8 PN LX (1 mm)
Control elements	
With parameterizable keys	Yes
Keyboard fonts	
<ul style="list-style-type: none"> <li>• Membrane keyboard                             <ul style="list-style-type: none"> <li>— user-definable label membrane keys</li> </ul> </li> <li>• Function keys                             <ul style="list-style-type: none"> <li>— Number of function keys</li> </ul> </li> <li>• Short-stroke keys                             <ul style="list-style-type: none"> <li>— Number of short-stroke keys</li> </ul> </li> </ul>	<p>No; possible via adjacent display with L-pattern at key edge</p> <p>8; 19 x 19 mm per button</p> <p>8</p>
Expansions for operator control of the process	
<ul style="list-style-type: none"> <li>• DP direct LEDs (LEDs as S7 output I/O)</li> <li>• Number of color modes for LED</li> <li>• Direct keys (keys as S7 input I/O)</li> </ul>	<p>8; Adjustable brightness</p> <p>5; red, green, blue, yellow, white</p> <p>8</p>
Installation type/mounting	
Mounting type	clamp fastening with additional mounting clips
Mounting position	Horizontal, vertical
Rack mounting	No
Front mounting	Yes; mounting clip - Torx T20 tighten to 0.2 Nm; enclosure - Torx T10 tighten to 0.2 Nm
Rail mounting	No
Wall mounting/direct mounting	No
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	30°; To the front/rear
Number of slots for command devices and signaling units	0
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V; 24 V can be looped through connector, interrupted when pulled
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	0.3 A
Type of output	
LED colors	
<ul style="list-style-type: none"> <li>• red</li> <li>• yellow</li> </ul>	<p>Yes; Adjustable brightness</p> <p>Yes; Adjustable brightness</p>

• green	Yes; Adjustable brightness
• white	Yes; Adjustable brightness
• blue	Yes; Adjustable brightness
<b>Digital inputs</b>	
Number of digital inputs	8; Total inputs and outputs max. 8 and 1x SIL 2 or 2x SIL 3
Input voltage	
• Rated value (DC)	24 V
<b>Digital outputs</b>	
Number of digital outputs	8; Max. 8 inputs and outputs (total)
Short-circuit protection	Yes
Switching capacity of the outputs	
• with resistive load, max.	100 mA
Output voltage	
• Rated value (DC)	24 V; Non-isolated
Total current of the outputs	
• Current per channel, max.	100 mA
• Current per group, max.	800 mA
<b>Interfaces</b>	
Number of industrial Ethernet interfaces	2; For the construction of lines and rings without external switch
Number of PROFINET interfaces	2; Incl. switch
Industrial Ethernet	
• Industrial Ethernet status LED	2; Per port
• Number of ports of the integrated switch	2; Per port
<b>Protocols</b>	
PROFINET	Yes; also 3rd party PLC
Supports protocol for PROFINET IO	Yes
PROFINET CBA	No
IRT	Yes
PROFIsafe	No
PROFIBUS	No
EtherNet/IP	No
MPI	No
AS-Interface	No
EIB/KNX	No
Protocols (Ethernet)	
• TCP/IP	No
Redundancy mode	
Media redundancy	
— MRP	Yes
Further protocols	
• AS-Interface Safety at Work	No
• CAN	No
• Data-Highway	No
• DeviceNet	No
• DeviceNet Safety	No
• Foundation Fieldbus	No
• INTERBUS	No
• INTERBUS-Safety	No
• Local Operating Network	No
• MODBUS	No
• SafetyBUS p	No
• SERCOS	No
• SUCOnet	No
• other bus systems	No
<b>Test commissioning functions</b>	
Illuminant test	Yes; During switch on
Key and signal lamp test	Yes; automatically when switching on
<b>EMC</b>	
Emission of radio interference acc. to EN 55 011	

<ul style="list-style-type: none"> <li>• Limit class A, for use in industrial areas</li> <li>• Limit class B, for use in residential areas</li> </ul>	<p>Yes; Group 1, measured at a distance of 10 m</p> <p>No</p>
<b>Degree and class of protection</b>	
IP (at the front)	IP54
IP (rear)	IP20
NEMA (front)	
<ul style="list-style-type: none"> <li>• Enclosure Type 4 at the front</li> <li>• Enclosure Type 4x at the front</li> <li>• Enclosure Type 12 at the front</li> </ul>	<p>No</p> <p>No</p> <p>No</p>
<b>Standards, approvals, certificates</b>	
CE mark	Yes
CSA approval	No
UL approval	No
cULus	No
FM approval	No
RCM (formerly C-TICK)	No
KC approval	No
EAC (formerly Gost-R)	No
CCC	No; not necessary
Suitable for safety functions	No
Marine approval	No
<b>Use in hazardous areas</b>	
<ul style="list-style-type: none"> <li>• ATEX Zone 2</li> <li>• ATEX Zone 22</li> <li>• cULus Class I Zone 1</li> <li>• cULus Class I Zone 2, Division 2</li> <li>• FM Class I Division 2</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>Marine approval</b>	
<ul style="list-style-type: none"> <li>• Germanischer Lloyd (GL)</li> <li>• American Bureau of Shipping (ABS)</li> <li>• Bureau Veritas (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (Class NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<p>0 °C</p> <p>60 °C</p>
<b>Operation (vertical installation)</b>	
<ul style="list-style-type: none"> <li>— For vertical installation, min.</li> <li>— For vertical installation, max.</li> </ul>	<p>0 °C</p> <p>60 °C</p>
<b>Operation (max. tilt angle)</b>	
<ul style="list-style-type: none"> <li>— At maximum tilt angle, min.</li> <li>— At maximum tilt angle, max.</li> </ul>	<p>0 °C</p> <p>60 °C</p>
<b>Operation (vertical installation, portrait format)</b>	
<ul style="list-style-type: none"> <li>— For vertical installation, min.</li> <li>— For vertical installation, max.</li> </ul>	<p>0 °C</p> <p>60 °C</p>
<b>Operation (max. tilt angle, portrait format)</b>	
<ul style="list-style-type: none"> <li>— At maximum tilt angle, min.</li> <li>— At maximum tilt angle, max.</li> </ul>	<p>0 °C</p> <p>60 °C</p>
<b>Ambient temperature during storage/transportation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<p>-20 °C</p> <p>70 °C</p>
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• Operation, max.</li> </ul>	95 %; no condensation
<b>configuration / header</b>	
<b>Configuration software</b>	
<ul style="list-style-type: none"> <li>• STEP 7 Basic (TIA Portal)</li> </ul>	Yes

• STEP 7 Professional (TIA Portal)	Yes
<b>Functionality under WinCC (TIA Portal)</b>	
<b>Process coupling</b>	
• S7-1200	Yes; with ET 200pro CPU and ET 200S CPU
• S7-1500	Yes
• S7-200	No
• S7-300/400	Yes; with F-CPU: STEP 7 V11 SP1 (or higher) and Safety V11 (or higher) or SIMATIC STEP 7 Basic V11 (or higher)
• LOGO!	No
• WinAC	Yes
• SINUMERIK	No
• SIMOTION	No
• Allen Bradley (EtherNet/IP)	No
• Allen Bradley (DF1)	No
• Mitsubishi (MC TCP/IP)	No
• Mitsubishi (FX)	No
• OMRON (FINS TCP)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus TCP/IP)	No
• Modicon (Modbus)	No
<b>Mechanics/material</b>	
Enclosure material (front)	Bayblend FR3010 enclosure, Autotex F150 front membrane
• Plastic	Yes; neutral enclosure, black RAL 9005
• Aluminum	No
• Stainless steel	No
<b>Service life</b>	
• Short-stroke keys (in switching cycles)	1 500 000
• LEDs (ON period)	100 %
<b>Dimensions</b>	
Width of the housing front	40.7 mm
Height of housing front	252.4 mm
Mounting cutout, width	24 mm; tolerances +0.5 mm, not including connection plug (depending on connector type)
Mounting cutout, height	244 mm; tolerances +0.5 mm, not including connection plug (depending on connector type)
Overall depth	68.15 mm
<b>Weights</b>	
Weight (without packaging)	280 g
Weight (with packaging)	300 g; incl. 1x 12-pole connector and 6x mounting clips
<b>Other</b>	
Merchandise	Yes; K S27602/TKS-008-KP8 PN LX-SIEMENS-C10093
Manufacturer name	GETT Gerätetechnik GmbH
Manufacturer's address	Mittlerer Ring 1, 08233 Treuen (Vogtland), Germany
Note:	key panel must be configured as 6AV3688-3AY36-0AX0 Key Panel
<b>last modified:</b>	1/12/2022 