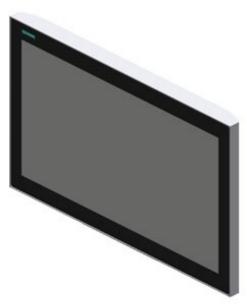
## **SIEMENS**

## Data sheet

6AV6646-1BD18-0AA0

SIMATIC ITC1900 V3 PRO, Industrial Thin Client, 19" widescreen TFT display, capacitive touch sensor, Supported protocols: RDP, VNC, Smart Server, HTML5 etc. standard design, prepared for support arm with add-on elements



General information	
Product type designation	ITC1900 V3
Short designation	SIMATIC ITC1900 V3
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	18.5 in
Display width	409.8 mm
Display height	230.4 mm
Number of colors	16 777 216
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	1 366 Pixel
<ul> <li>Vertical image resolution</li> </ul>	768 Pixel
General features	
<ul> <li>non-reflective and tempered mineral glass screen</li> </ul>	Yes
Backlighting	
Type of backlighting	LED, dimmable
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h; At 25°C

Backlight dimmable	Yes
Control elements	
Touch operation	
Design as multi-touch screen	Yes; Projective-capacitive
Monitor keyboard	Yes
Installation type/mounting	
Design	Support arm mounting
Support arm mounting	Yes; Suitable for support arm and extension components (please refer to manual)
Built-in unit	No
maximum permitted forward tilt angle from vertical	35°
maximum permitted backward tilt angle from vertical	35°
Supply voltage	
Type of supply voltage	24 V DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	1.4 A
Starting current inrush I²t	0.5 A <sup>2</sup> ·s
Power	
Active power input, typ.	34 W
Interfaces	
Number of industrial Ethernet interfaces	2; 2 ports (switch)
Number of USB interfaces	4; on rear
Connection for keyboard/mouse	USB
Industrial Ethernet	
Transmission rate, max.	1 000 Mbit/s
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTTPS	Yes
• HTML	Yes; HTML5
• XML	Yes
· ····	

	• CSS	Yes
• Java VM No  Protocols (terminal link)  • Sm@rtServer Yes  • RDP Yes  • NNC viewer Yes  • Citrix Yes  • SINUMERIK Yes  Degree and class of protection  If (at the front) IP65  NEMA (front)  • Enclosure Type 4 at the front Yes  • Enclosure Type 4 at the front Yes  • Enclosure Type 12 at the front Yes  Standards, approvals, certificates  CE mark Yes  GULus Yes  FM approval Yes  RCM (formerly C-TICK) Yes  KC approval Yes  EAC (formerly Gost-R) Yes  EAC (formerly Gost-R) Yes  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 2  • ECEEX Zone 2  • ECEEX Zone 2  • CULus Class I Zone 2, Division 2  • CHUS Class I Zone 3, Division 2  • CHUS Class I Zone 4, Division 2  • CHUS Class I Zone 5, Division 2  • CHUS Class I Zone 6, Division 1  • Germanischer Lloyd (GL)  • American Bureau of Shipping (ABS)  • Del Norske Veritas (DN)  • Loyds Register of Shipping (LRS)  • Lloyds Register of Shipping (LRS)  • Lloyds Register of Shipping (LRS)  • No  • Polski Rejestr Statkow (PRS)  • Chinese Classification Society (CCS)	• Active X	No
Protocols (terminal link)  • Sm@rtServer  • RDP  • Ves  • VRDP  • Vroc viewer  • Clitix  • SINUMERIK  Pes  • SINUMERIK  Pes  Degree and class of protection  IP (at the front)  NEMA (front)  • Enclosure Type 4 at the front  • Enclosure Type 4 at the front  • Enclosure Type 12 at the front  • Enclosure Type 4x at the front  • Yes  Standards, approvals, certificates   Ves  Standards, approvals, certificates  • Yes  CULus  • Yes  RCM (formerly C-TICK)  • Yes  RCM (formerly C-TICK)  • Yes  RCM (formerly Gost-R)  • Yes  CE mark  • ATEX Zone 2  • ATEX Zone 2  • ATEX Zone 2  • ATEX Zone 22  • No  • ATEX Zone 22  • CULus Class I Zone 2, Division 2  • No  • Enclosure Type 4x at the front  • Germanischer Lloyd (GL)  • American Bureau of Shipping (ABS)  • Bureau Veritas (BV)  • Det Norske Veritas (DNV)  • No  • Loyds Register of Shipping (RRS)  • No  • Lloyds Register of Shipping (RRS)  • No  • Nippon Kaji Kyokai (Class NK)  • No  • Polski Rejestr Statkow (PRS)  • Chinese Classification Society (CCS)	<ul> <li>JavaScript</li> </ul>	Yes
	● Java VM	No
	Protocols (terminal link)	
	Sm@rtServer	Yes
• Citrix • SINUMERIK Pes  Degree and class of protection  IP (at the front) IP (at the front) NEMA (front) • Enclosure Type 4 at the front • Enclosure Type 4 x at the front • Enclosure Type 4 x at the front • Enclosure Type 12 at	• RDP	Yes
• SINUMERIK  Pegree and class of protection  IP (at the front)  NEMA (front)  • Enclosure Type 4 at the front • Enclosure Type 12 at the front • Enclosure Type 4 at the fort • Enclosure Type 4 at the fort • Enclosu	<ul><li>VNC viewer</li></ul>	Yes
IP (at the front) IP (at the front) NEMA (front)  • Enclosure Type 4 at the front • Enclosure Type 4x at the front • Enclosure Type 4x at the front • Enclosure Type 12 at the front  Standards. approvals. certificates  CE mark  CULus  Yes  FM approval  Yes  RCM (formerly C-TICK)  Yes  RCM (formerly C-TICK)  Yes  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2 • ATEX Zone 2 • ATEX Zone 2 • IECEx Zone 2 • IECEx Zone 2 • IECEx Zone 2 • CULus Class I Zone 2, Division 2 • FM Class I Division 2  Marine approval  • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Chiense Classification Society (CCS)  • Chinese Classification Society (CCS)	• Citrix	Yes
P(at the front)	• SINUMERIK	Yes
NEMA (front)  • Enclosure Type 4 at the front • Enclosure Type 4 at the front • Enclosure Type 4 at the front • Enclosure Type 12 at the front • Enclosure Type 12 at the front • Enclosure Type 12 at the front  Standards, approvals, certificates  CE mark  CULus  Yes  FM approval  Yes  RCM (formerly C-TICK)  Yes  RCA (formerly C-TICK)  Yes  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2 • ATEX Zone 2 • IECEx Zone 22 • IECEx Zone 22 • CULus Class I Zone 2, Division 2 • CULus Class I Jovision 2 • FM Class I Division 2 • FM Class I Division 2  Marine approval  • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Korean Register of Shipping (LRS) • No • Lloyds Register of Shipping (LRS) • No • Polski Rejestr Statkow (PRS) • Chinese Classification Society (CCS)	Degree and class of protection	
Enclosure Type 4 at the front Enclosure Type 4x at the front Enclosure Type 12 at the front Yes  Standards, approvals, certificates  CE mark CULus Yes  FM approval Yes  RCM (formerly C-TICK) Yes  EAC (formerly Gost-R) Use in hazardous areas  ATEX Zone 2 ATEX Zone 2 IECEX Zone 2 IECEX Zone 2 IECEX Zone 2 IECEX Zone 2 CULus Class I Zone 2, Division 2 FM Class I Division 2  FM Class I Division 2  American Bureau of Shipping (ABS) Bureau Veritas (BV) American Register of Shipping (KRS) Lloyds Register of Shipping (LRS) No Polski Rejestr Statkow (PRS) Chinese Classification Society (CCS)  No Chinese Classification Society (CCS)	IP (at the front)	IP65
● Enclosure Type 4x at the front ● Enclosure Type 12 at the front  Ves  Standards, approvals, certificates  CE mark  CE mark  CULus  Yes  RCM (formerly C-TICK)  Yes  RCM (formerly Gost-R)  Use in hazardous areas  ● ATEX Zone 2  ● ATEX Zone 2  ● IECEx Zone 2  ● IECEx Zone 2  ● IECEx Zone 2  ● CULus Class I Zone 2, Division 2  ● FM Class I Division 2  Marine approval  ● Germanischer Lloyd (GL)  ● American Bureau of Shipping (ABS)  ● Bureau Veritas (DNV)  ● Det Norske Veritas (DNV)  ● Korean Register of Shipping (KRS)  ● No  ● Polski Rejestr Statkow (PRS)  ● Chinese Classification Society (CCS)	NEMA (front)	
Standards, approvals, certificates  CE mark  CE mark  Ves  GULUS  FM approval  KC approval  EAC (formerly C-TICK)  Yes  EAC (formerly Gost-R)  Use in hazardous areas   ATEX Zone 2  ATEX Zone 2  IECEx Zone 3  IECEx Zone 3  IECEX Zone 4  IECEX Zone 5  IECEX Zone 6  IECEX Zone 7  IECEX Zone 8  IECEX Zone 8  IECEX Zone 8  IECEX Zone 8  IECEX Zone 9  IEC	<ul> <li>Enclosure Type 4 at the front</li> </ul>	Yes
Standards, approvals, certificates  CE mark  CULus  Yes  RM approval  RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 22  • IECEx Zone 22  • IECEx Zone 22  • CULus Class I Zone 2, Division 2  • FM Class I Division 2  Marine approval  • Germanischer Lloyd (GL)  • American Bureau of Shipping (ABS)  • Bureau Veritas (BV)  • Det Norske Veritas (DNV)  • Lloyds Register of Shipping (KRS)  • Uspolski Rejestr Statkow (PRS)  • Chinese Classification Society (CCS)	<ul> <li>Enclosure Type 4x at the front</li> </ul>	Yes
CE mark         Yes           cULus         Yes           FM approval         Yes           RCM (formerly C-TICK)         Yes           KC approval         Yes           EAC (formerly Gost-R)         Yes           Use in hazardous areas         Yes           • ATEX Zone 2         No           • ATEX Zone 22         No           • IECEx Zone 2         No           • IECEx Zone 2         No           • CULus Class I Zone 2, Division 2         No           • FM Class I Division 2         No           Marine approval         No           • American Bureau of Shipping (ABS)         No           • Bureau Veritas (BV)         No           • Det Norske Veritas (DNV)         No           • Lloyds Register of Shipping (KRS)         No           • Lloyds Register of Shipping (LRS)         No           • Nippon Kaiji Kyokai (Class NK)         No           • Polski Rejestr Statkow (PRS)         No           • Chinese Classification Society (CCS)         No	<ul> <li>Enclosure Type 12 at the front</li> </ul>	Yes
CULus Yes FM approval Yes RCM (formerly C-TICK) Yes KC approval Yes EAC (formerly Gost-R) Yes Use in hazardous areas  • ATEX Zone 2 No • ATEX Zone 22 No • IECEx Zone 2 No • Outlook Class I Zone 2, Division 2 No  Marine approval  • Germanischer Lloyd (GL) No • American Bureau of Shipping (ABS) No • Bureau Veritas (BV) No • Det Norske Veritas (DNV) No • Korean Register of Shipping (KRS) No • Lloyds Register of Shipping (LRS) No • Nippon Kaiji Kyokai (Class NK) No • Polski Rejestr Statkow (PRS) No • Chinese Classification Society (CCS)		
RCM (formerly C-TICK)  KC approval  PEAC (formerly Gost-R)  Use in hazardous areas  ATEX Zone 2  ATEX Zone 2  IECEx Zone 2  IECE		
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 22  • IECEx Zone 22  • IECEx Zone 22  • CULus Class I Zone 2, Division 2  • FM Class I Division 2  Marine approval  • Germanischer Lloyd (GL)  • American Bureau of Shipping (ABS)  • Bureau Veritas (BV)  • Det Norske Veritas (DNV)  • Korean Register of Shipping (LRS)  • Nippon Kaiji Kyokai (Class NK)  • Polski Rejestr Statkow (PRS)  • Chinese Classification Society (CCS)		
KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2 • ATEX Zone 22 • No • IECEx Zone 22 • No • FM Class I Division 2  • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Korean Register of Shipping (KRS) • No • Nippon Kaiji Kyokai (Class NK) • Polski Rejestr Statkow (PRS) • Chinese Classification Society (CCS)		
EAC (formerly Gost-R)  Use in hazardous areas  • ATEX Zone 2 • ATEX Zone 22 • IECEx Zone 22 • IECEx Zone 22 • CULus Class I Zone 2, Division 2 • FM Class I Division 2  Marine approval  • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • No • Nippon Kaiji Kyokai (Class NK) • Polski Rejestr Statkow (PRS) • Chinese Classification Society (CCS)		
Use in hazardous areas  • ATEX Zone 2 • ATEX Zone 22 • IECEx Zone 2 • IECEx Zone 2 • CULus Class I Zone 2, Division 2 • FM Class I Division 2  • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Korean Register of Shipping (KRS) • No • Nippon Kaiji Kyokai (Class NK) • Polski Rejestr Statkow (PRS) • Chinese Classification Society (CCS)		
ATEX Zone 22  ATEX Zone 22  IECEx Zone 2  IECEx Zone 22  CULus Class I Zone 2, Division 2  FM Class I Division 2  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  No  Chinese Classification Society (CCS)		Yes
ATEX Zone 22  IECEx Zone 2  IECEx Zone 22  CULus Class I Zone 2, Division 2  FM Class I Division 2  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  No  No  Lloyds Register Statkow (PRS)  No  Chinese Classification Society (CCS)		N.
IECEx Zone 2  IECEx Zone 22  Cultus Class I Zone 2, Division 2  FM Class I Division 2  Output  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  No  Chinese Classification Society (CCS)		
IECEx Zone 22  Culus Class I Zone 2, Division 2  FM Class I Division 2  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  No  Chinese Classification Society (CCS)		
CULus Class I Zone 2, Division 2  FM Class I Division 2  No  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  Chinese Classification Society (CCS)		
FM Class I Division 2  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  No  No  No  No  Polski Rejestr Statkow (PRS)  Chinese Classification Society (CCS)		
Germanischer Lloyd (GL)     American Bureau of Shipping (ABS)     Bureau Veritas (BV)     Det Norske Veritas (DNV)     Korean Register of Shipping (KRS)     Lloyds Register of Shipping (LRS)     No     Nippon Kaiji Kyokai (Class NK)     Polski Rejestr Statkow (PRS)     Chinese Classification Society (CCS)	<ul><li>cULus Class I Zone 2, Division 2</li></ul>	No
<ul> <li>Germanischer Lloyd (GL)</li> <li>American Bureau of Shipping (ABS)</li> <li>Bureau Veritas (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Korean Register of Shipping (KRS)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul>	FM Class I Division 2	No
<ul> <li>American Bureau of Shipping (ABS)</li> <li>Bureau Veritas (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Korean Register of Shipping (KRS)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul>	Marine approval	
<ul> <li>Bureau Veritas (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Korean Register of Shipping (KRS)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul>	<ul> <li>Germanischer Lloyd (GL)</li> </ul>	No
<ul> <li>Det Norske Veritas (DNV)</li> <li>Korean Register of Shipping (KRS)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul>	<ul><li>American Bureau of Shipping (ABS)</li></ul>	No
<ul> <li>Korean Register of Shipping (KRS)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul>	<ul><li>Bureau Veritas (BV)</li></ul>	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> <li>No</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> </ul> No No	<ul><li>Det Norske Veritas (DNV)</li></ul>	No
<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> <li>No</li> </ul>	<ul><li>Korean Register of Shipping (KRS)</li></ul>	No
<ul> <li>Polski Rejestr Statkow (PRS)</li> <li>Chinese Classification Society (CCS)</li> <li>No</li> </ul>	<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
Chinese Classification Society (CCS)  No	<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	No
	<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No
Ambient conditions	• Chinese Classification Society (CCS)	No
Ambient conditions	Ambient conditions	

Ambient temperature during operation  • min.  • max.  45 °C  Ambient temperature during storage/transportation  • min.  • min.  • max.  60 °C  Relative humidity  • Operation, max.  90 %; no condensation  Vibrations  • Vibration load in operation  • Vibration load during transport/storage  Shock testing  • Shock load during operation  150 m/s²	
<ul> <li>max.</li> <li>Ambient temperature during storage/transportation</li> <li>min.</li> <li>-20 °C</li> <li>max.</li> <li>60 °C</li> <li>Relative humidity</li> <li>Operation, max.</li> <li>Vibrations</li> <li>Vibration load in operation</li> <li>Vibration load during transport/storage</li> <li>Shock testing</li> </ul>	
Ambient temperature during storage/transportation  • min.  • max.  • max.  60 °C  Relative humidity  • Operation, max.  Vibrations  • Vibration load in operation  • Vibration load during transport/storage  Shock testing	
<ul> <li>min.</li> <li>-20 °C</li> <li>max.</li> <li>60 °C</li> <li>Relative humidity</li> <li>Operation, max.</li> <li>Vibrations</li> <li>Vibration load in operation</li> <li>Vibration load during transport/storage</li> <li>Shock testing</li> </ul>	
<ul> <li>max.</li> <li>Relative humidity</li> <li>Operation, max.</li> <li>Vibrations</li> <li>Vibration load in operation</li> <li>Vibration load during transport/storage</li> <li>Shock testing</li> </ul>	
Relative humidity  • Operation, max.  90 %; no condensation  Vibrations  • Vibration load in operation  • Vibration load during transport/storage  Shock testing	
<ul> <li>Operation, max.</li> <li>Vibrations</li> <li>Vibration load in operation</li> <li>Vibration load during transport/storage</li> <li>Shock testing</li> </ul>	
Vibrations	
<ul> <li>Vibration load in operation</li> <li>Vibration load during transport/storage</li> <li>Shock testing</li> </ul>	
Vibration load during transport/storage  10 m/s²  Shock testing	
Shock testing	
Shock load during operation  150 m/s²	
one on the state of the state o	
• shock acceleration during storage/transport  150 m/s²	
Software	
Web browser  Yes; HTML5, CSS	
PDF reader Yes	
Configuration	
Configuration	
• Local Yes	
• Remote Yes; Via web page	
Languages	
Online languages	
<ul> <li>Number of online/runtime languages</li> <li>2; german / english</li> </ul>	
Peripherals/Options	
Printer No	
USB memory Yes; USB storage medium can be connected	
Additional software components loadable No	
Mechanics/material	
Enclosure material (front)	
• Aluminum Yes	
Dimensions	
Width of the housing front 462 mm	
Width of the housing from	
Height of housing front  293 mm; Without basic adapter	
Height of housing front 293 mm; Without basic adapter	
Height of housing front  293 mm; Without basic adapter  Overall depth  101 mm; Without basic adapter	