

Article-No.: 122603

Calmo Panel-PC 19,0" for in-wall installation

i5-9500, 8GB RAM, 120GB SSD, WLAN

Empower Your Operations with Precision and Power.

The Calmo Panel-PC 19.0" Recessed Variant offers intuitive touchscreen operation for industrial and enterprise applications. Its robust construction and responsive touch technology ensure reliable performance. With a powerful Intel® Core™ i5 processor and generous memory, it effortlessly handles demanding tasks. The fast SSD storage enables quick data access. Ideal for industrial applications and digital information systems, the Calmo Panel-PC 19.0" Recessed Variant provides a versatile solution.

Technical data

Service

Service	2 years Bring-In Extension on request
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Plug-in card communication

WiFi usage

Note for wifi usage	The range from 5150 MHz to 5350 MHz of the 5 GHz WLAN band is for indoor use only.
manufacturer	Intel®
interface	M.2
WLAN chipset	Intel® Dual Band Wireless AX200 Wi-Fi 6
WLAN transmission standard	IEEE 802.11 ax/ac/a/b/g/n
WLAN transmission speed	10.000 MBit
WLAN antenna connections	2
WLAN Antenna connection type	MHF IV
bluetooth chipset	Intel®
bluetooth class	5.0
operating temperature range	-40°C to 85°C
relative humidity (operating)	95% (non-condensing)

Mainboard Accessories

Slot bracket extension

slot bracket extension	1x serial (slot bracket with 9pin serial plug)
interface	internal 2mm COM

Mainboard Desktop

manufacturer	Kontron®
marking	D3674-B
form factor	Thin Mini-ITX
socket	LGA1151
chipset	Intel® H310
hint	supports 8th and 9th generaion CPUs



Highlights

- Intuitive touchscreen operation
- Robust construction
- Powerful Intel® Core™ i5 processor
- Generous memory
- Fast SSD storage

Article-No.: 122603

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working memory max.	32 GB
memory slots	2
memory technology	DDR4L-SDRAM
graphic onboard	Intel® HD Graphics, DirectX12 support (with appropriate CPU)
max. resolution HDMI	4,096 x 2,160 pixels @30Hz / 2,560 x 1,600 pixels @60Hz (HDMI 1.4)
max. resolution DisplayPort	4,096 x 2,304 pixels @60Hz (DisplayPort 1.2)
graphic note	Intel® H310 chipset supports only the simultaneous operation of max. 2 monitors
network	
network chipset	Realtek RTL8111E
transmission rate	10/100/1000 Mbps
PXE support	yes
Wake on LAN (WOL) support	yes
audio	
audio chipset	Realtek ALC 255
sound mode	5.1-channel high definition
rear interfaces	
USB 3.2 Gen1 (5Gbit/s)	2
USB 2.0	2
PS/2	1
HDMI	1
DisplayPort	1
Note monitor interfaces	HDMI 1.4 DisplayPort 1.2
LAN (RJ-45)	1
audio	line-in, line-out
DC in	1
hint	Wide range input 19-24V DC-In
M.2 for SSD	1
hint	for M.2 SSD (2280 SATA/PCIe® x4, AHCI/NVMe®)
M.2 for WLAN	1
hint	for WLAN module
USB 3.2 Gen1 (5Gb/s) header	1
USB 2.0 header	2
hint	1x USB Header provides 2x USB Channel
serial	1
hint	RS-232 only internal, not accessible from outside
Trusted Platform Module (TPM)	yes



Article-No.: 122603

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Header	
Trusted Platform Module (TPM)	Intel® TPM V2.0
SATA3 (6 Gb/s)	2
other	
24-hour continuous operation	yes
available until	Q1 2022
particularity	Recovery BIOS, System/BIOS Password, Boot Sequence Control, Serial/ Parallel/ USB-Port Access, Boot Sector Virus Warning, Write Protection for Flash BIOS, Erase Disk (BIOS Feature, license required!); Intel integrated TPM V2.0, optional Infineon TPM Module (TCG compliant, socket prepared)
Processor	
manufacturer	Intel®
marking	Core™ i5
type	9500T
cpu socket	LGA1151
cores	6
threads	6
clock rate	2,20 GHz
max. clock frequency with Intel® Turbo Boost technology	3,70 GHz
smartCache	9 MB
bit set	64 bit
max. TDP	35 Watt
processor graphic	Intel® UHD Graphics 630
Intel® Hyper-Threading Technology	no
Intel® Virtualization Technology (VT-x)	yes
ECC memory support	no
Power supply	
manufacturer	EDACPOWER ELEC.
form factor	outboard
type	table power pack
power	120 Watt
input voltage range	100 - 240V AC V
current draw	2,0 A
efficiency level	VI
output voltage	19 V
output voltage Ampere	6,31 A
polarization	DC

Article-No.: 122603

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hollow plug Outer diameter	7,4 mm
hollow plug Depth	11,9 mm
hollow plug inner diameter	5,0 mm
plug for external power supply unit	Hollow plug 7,4mm x 5mm x 11,9mm
hollow plug Polarity	Plus inside
hollow plug angle	90°
current supply	IEC6 three-pin connector
power switches	no
width	60 mm
hight	35 mm
deepth	140 mm
heart rate	50 - 60 Hz
CE	yes
CCC	yes
FCC	yes
cUL	yes
TÜV	TÜV SÜD
RoHS	yes
EAC	ja
Hard disk	
memory capacity	128 GB
type	SSD
frame size	2,5"
interface	SATA3 with 6 Gb/s
24-hour continuous operation	yes
Main storage	
size	8 GB
technology	DDR4 SO-DIMM
form factor	SO-DIMM
connector	260-pole
speed	2666 MHz
tension	1,2 V
System	
WiFi usage	
Note for wifi usage	The range from 5150 MHz to 5350 MHz of the 5 GHz WLAN band is for indoor use only.
maker	Calmo
Panel	
display type	TFT

Article-No.: 122603

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backlight	LCD
screen diagonal	19" (48.26 cm)
aspect ratio	5:4
light	250 cd/m²
Contrast (static)	1.000:1
reaction time	5
Viewing angle (h/v)	170°/160°
Frequency (h/v)	30 - 82 Hz / 50 - 75 Hz
Number of colours	16.7 million.
Maximum resolution	1,280 x 1,024 pixels (SXGA)

Touch

touch technology	Projected capacitive touch (P-cap)
pane	antireflective glass (non glare)
usability	Multi-Touch (10 fingers)
Usability with glove	Latex glove Work glove ESD-glove

Processor

maker	Intel®
label	Core™ i5
bloke	9500
plinth	LGA1151
Number of cores	6
Number of threads	6
clock	3,00 GHz
max. clock frequency with Intel® Turbo Boost technology	4,40 GHz
L3 Cache	9 MB
bit set	64
max. TDP	35
processor graphic	Intel® UHD Graphics 630

Operating system

installed operating system	no operating system included
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Main storage

quantum	1 x
greatness	8 GB
technology	DDR4-SDRAM
form factor	SO-DIMM
memory speed	2666 MHz

Hard disk

installed hard disk	120 GB SSD 2.5" SATA3 with 6 Gb/s
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Article-No.: 122603

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Mainboard

mainboard	Powered by Kontron® - Made in Germany
maker	Kontron®
label	D3674-B
form factor	Thin Mini-ITX
plinth	LGA1151
chipset	Intel® H310
Memory max. size	32 GB
Memory Slots	2
main memory technology	DDR4-SDRAM
form factor	SO-DIMM
Graphic onBoard	Intel® HD Graphics (with corresponding CPU)

Audio

Audio Chipset	Realtek ALC 255
sound mode	5.1-channel high definition

Rear interfaces

USB3.0	2
USB2.0	2
PS/2	1
HDMI	1
DisplayPort	1
LAN (RJ-45)	1
line-in	1
line out	1
DC in	1
WLAN antenna connections	2

Internal interfaces

Internal interfaces	2x USB 3.0, 2x USB 2.0, serial, 2x SATA3 (6Gb/s), LVDS, backlight inverter
USB 3.0	2
USB 2.0	2
RS-232	1
Trusted Platform Module (TPM)	integrated
SATA3 (6Gb/s)	2

IO extension

slot bracket extension	1x serial (RS-232)
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Communicating

Network Chipset	Realtek RTL8111E
transmission rate	10/100/1000 Mbps

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Wake on LAN (WOL) support	yes
PXE support	yes
Auto-Power-On function	yes
WLAN chipset	Intel® Wi-Fi 6 AX200
WLAN transmission speed	2.400 MBit
WLAN transmission standard	IEEE 802.11 ax/ac/a/b/g/n
Bluetooth	5.2
Expansion slots	
expansion slots	1x M.2 2280 M-key (PCIe® x4), 1x M.2 2230 E-key
Expansion slots	
PCIe M.2 WLAN (2230)	1
advice	occupied by WLAN module
Power supply	
Power supply (external)	120 Watt, external input: 100-240V AC / 50-60Hz Output: 19V DC / 6,32A
voltage input range	100 - 240V AC
Voltage from	100
Voltage up to	240
polarization	AC
Output voltage Volt	19 V
Output voltage Ampere	6,32 A
Devices Power supply	
wide range input	19 - 24V DC
advice	Wide range input usable via DC-In or Phoenix connector
Surrounding area	
operating temperature range	0°C to 45°C
IP protection class (front side)	IP 65
IP Protection class (rear)	IP 50
Shell	
amplitude	460,40 mm
elevation	385,60 mm
deep	68.51 mm
installation dimensions	441,10 x 366,10 mm
ventilation	fanless

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installation option	Panel mounting via VESA 100 possible.\Foot not included.
advice	CPU is heat optimized via BIOS to 35Watt TDP
stock	Plastic / Metal
tint	black
loudness	0 dB(A)
Certifications	
CE	yes
24/7 continuous operation	yes
grade	EXTRA Computer has a quality management system which is certified according to DIN ISO 9001
Image stability	
Available until	2024
Service	
guarantee	2 years Bring-In Extension on request