

EXPC-1519 Series

Zone 2 19-inch panel computers with multiple connectivity options



Features and Benefits

- Anti-scratch, 19-inch, sunlight viewable, 1000-nit LCD panel
- High-performance Intel® processor, Intel® Core™ i7-3555LE or Intel® Celeron® 1047UE CPU
- Fanless design with highly efficient heat dissipation for 70°C environments
- Boots up within 3 minutes at -40°C, without a heater
- Multi-touch, glove-friendly touchscreen interface
- Cable gland and standard USB Type-A/RJ45 connector design
- 4 LAN ports with independent MACs; 2 RJ45 and 2 fiber ST
- Totally sealed IP66/NEMA 4X enclosure
- Class 1 Division 2, ATEX Zone 2, and IECEx certified
- Dual AC/DC power supply
- Optional WLAN and TPM module, available by request

Certifications



Introduction

The EXPC-1519 panel computers are designed for indoor and outdoor Zone 2 applications in hazardous environments. The EXPC-1519 Series features a third-generation Intel® Core™ i7-3555LE 2.5 GHz or Celeron 1047UE 1.4 GHz processor, with up to 16 GB of memory to deliver high-performance processing.

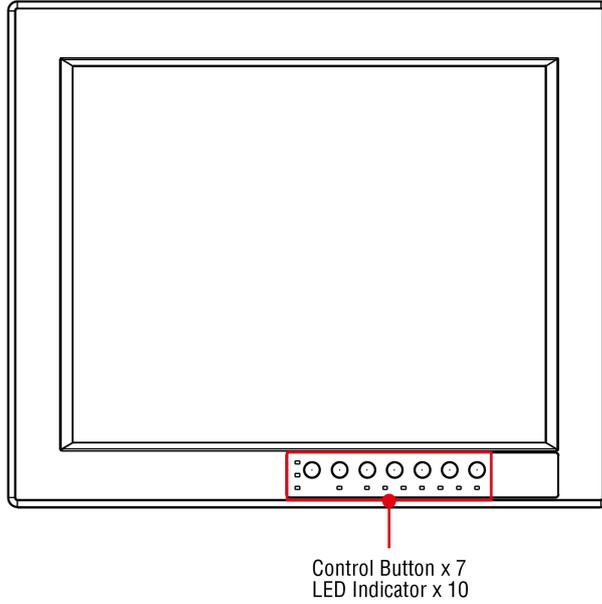
The EXPC-1519 Series offers flexible interface connectivity options to meet your application needs: standard connectors with cable glands, terminal block with cable glands, and standard connectors on the bottom panel.

The EXPC-1519 computers support wide-temperature (-40 to 70°C) operation, and come with a patented, fanless, streamlined enclosure designed for highly efficient heat dissipation, making this one of the most reliable industrial platforms available for harsh, hot outdoor environments like oil and gas fields and drilling platforms.

In addition, the EXPC-1519 computers feature touchscreen controls with anti-reflection treatment and 1000-nit LED backlight, making them easy to read even during peak daylight hours.

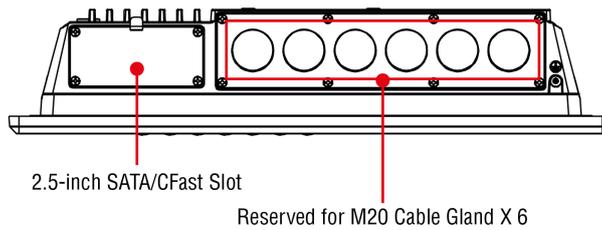
Appearance

Front View



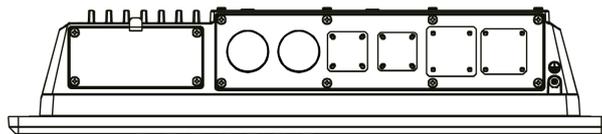
Bottom View

(EXPC-1519-C1-S1-T, EXPC-1519-C7-S1-T, EXPC-1519-C1-S2-T, EXPC-1519-C7-S2-T)

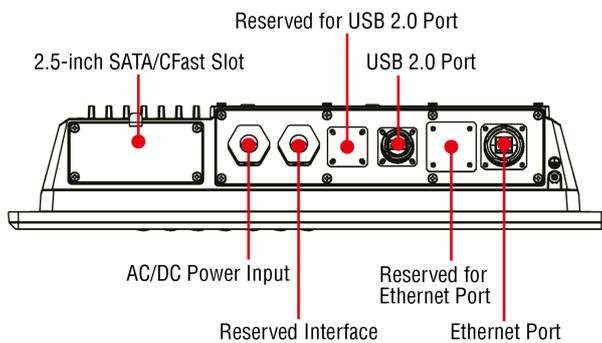


Bottom View

(EXPC-1519-C1-S3-T, EXPC-1519-C7-S3-T)



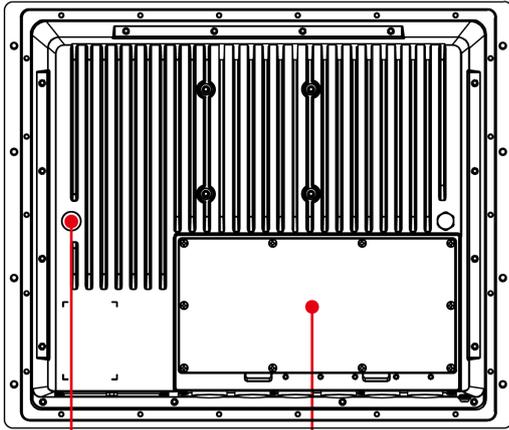
Out-of-the-box view; connectors must be installed by the user



View with connectors installed

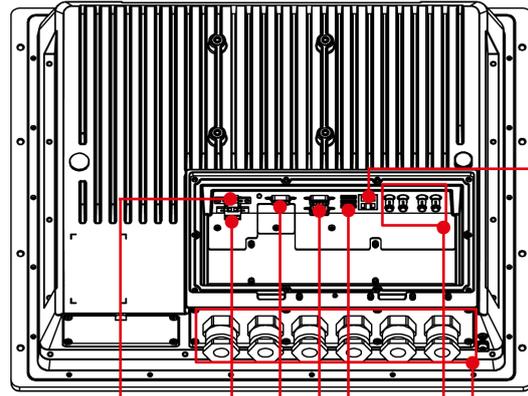
Rear View

(EXPC-1519-C1-S1-T, EXPC-1519-C7-S1-T)



Optional Antenna Port (N type)

Connector Panel



DC Input

VGA Port

USB 2.0 x 3

Optional M20
Cable Glands

AC Input

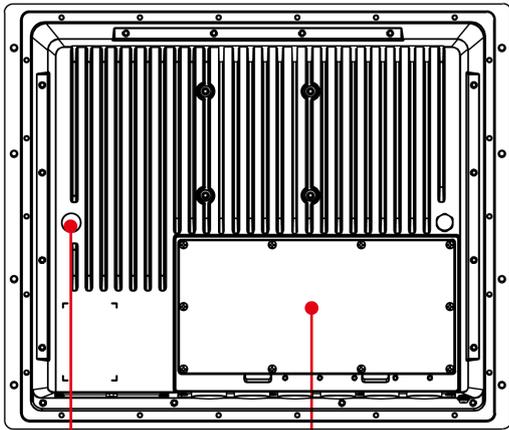
Serial Port x 2

Fiber Port x 2

Ethernet Port x 2

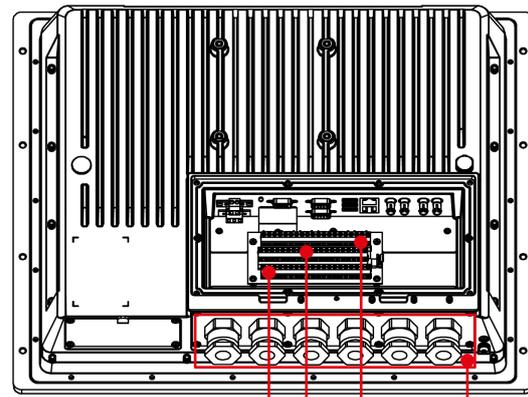
Rear View

(EXPC-1519-C1-S2-T, EXPC-1519-C7-S2-T)



Optional Antenna Port (N type)

Connector Panel



Serial Port x 2

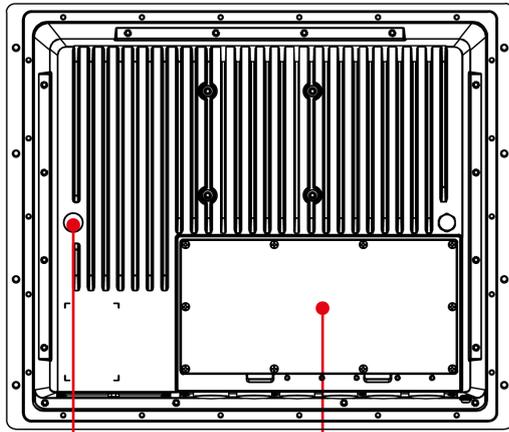
USB 2.0 x 4

Ethernet Port x 2

Optional M20 Cable Glands

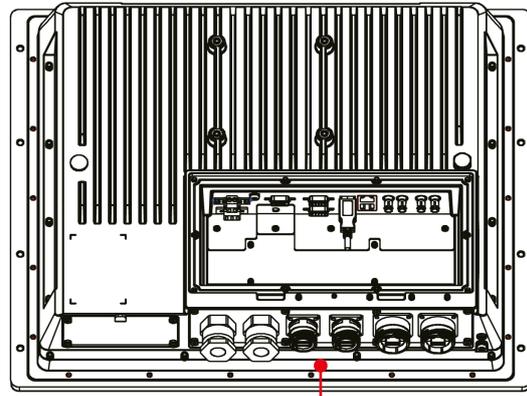
Rear View

(EXPC-1519-C1-S3-T, EXPC-1519-C7-S3-T)



Optional Antenna Port (N type)

Connector Panel



Connectors (must be installed by the user)

Specifications

Computer

CPU	EXPC-1519-C1-x-T: Intel® Celeron® Processor 1047UE (2M Cache, 1.40 GHz) EXPC-1519-C7-x-T: Intel® Core™ i7-3555LE Processor (4M Cache, up to 3.20 GHz)
System Memory Pre-installed	4 GB DDR3/DDR3L
System Memory Slot	SODIMM DDR3/DDR3L slot x 2
Pre-installed OS	OS is not pre-installed
Supported OS	Windows 7 Pro for Embedded Systems Windows Embedded Standard 7 (WS7P) 64-bit Windows 10 Pro 64-bit Windows 10 Embedded IoT Ent 2016 LTSB High End EPKEA Windows 10 Embedded IoT Ent 2016 LTSB Value EPKEA
Storage Slot	2.5-inch SSD slot x 1 CFast slot x 1

Computer Interface

Ethernet Ports	EXPC-1519-C1-S1-T/C1-S2-T/C7-S1-T/C7-S2-T: Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 2 EXPC-1519-C1-S3-T/C7-S3-T: Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 1
Serial Ports	EXPC-1519-C1-S1-T/C1-S2-T/C7-S1-T/C7-S2-T: RS-232/422/485 ports x 2, software-selectable (terminal block)
USB 2.0	EXPC-1519-C1-S1-T/C7-S1-T: USB 2.0 hosts x 3, type-A connectors EXPC-1519-C1-S2-T/C7-S2-T: USB 2.0 hosts x 4, type-A connectors EXPC-1519-C1-S3-T/C7-S3-T: USB 2.0 hosts x 1, type-A connectors
Video Output	EXPC-1519-C1-S1-T/C7-S1-T: VGA x 1, 15-pin D-sub connector (female)

LED Indicators

System	Power x 1
--------	-----------

Display

Active Display Area	376.32 (H) x 301.06 (V) mm
Aspect Ratio	5:4
Contrast Ratio	1000:1

Light Intensity (Brightness)	1000 cd/m ²
Max. No. of Colors	16.7M (8-bit/color)
Panel Size	19-inch viewable image
Panel Type	TN
Pixel Pitch (RGB)	0.294 (H) x 0.294 (V) mm
Pixels	1280 x 1024
Response Time	5 ms (gray to gray)
Viewing Angles	170°/160°

Touch Function

Touch Type	Capacitive Touch (PCAP)
Touch Support Points	4 points
Glove Support	Yes

Serial Interface

Baudrate	50 bps to 115.2 kbps
Data Bits	5, 6, 7, 8
Flow Control	RTS/CTS, XON/XOFF, ADDC® (automatic data direction control) for RS-485, RTS Toggle (RS-232 only)
Parity	None, Even, Odd, Space, Mark
Stop Bits	1, 1.5, 2

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND

Power Parameters

Input Voltage	100 to 240 VAC, 24 VDC
---------------	------------------------

Physical Characteristics

Housing	Metal
Dimensions	483 x 408 x 99.5 mm (19.02 x 16.06 x 3.92 in)
Weight	12,700 g (28.00 lb)

Environmental Limits

Operating Temperature	-40 to 70°C (-40 to 158°F)
Storage Temperature (package included)	-40 to 70°C (-40 to 158°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Environmental Testing	IEC 60068-2-1, DNVGL-CG-0339 IEC 60068-2-2, DNVGL-CG-0339 IEC 60068-2-2, IEC 60945 IEC 60068-2-30, IEC 60945
Hazardous Locations	ATEX, Class I Division 2, IECEx
Safety	EN 60950-1, IEC 60950-1, UL 60950-1
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6, IEC 60068-2-6, IEC 60945, IEC 60068-2-64, DNVGL-CG-0339

Declaration

Green Product	RoHS, CRoHS, WEEE
---------------	-------------------

Warranty

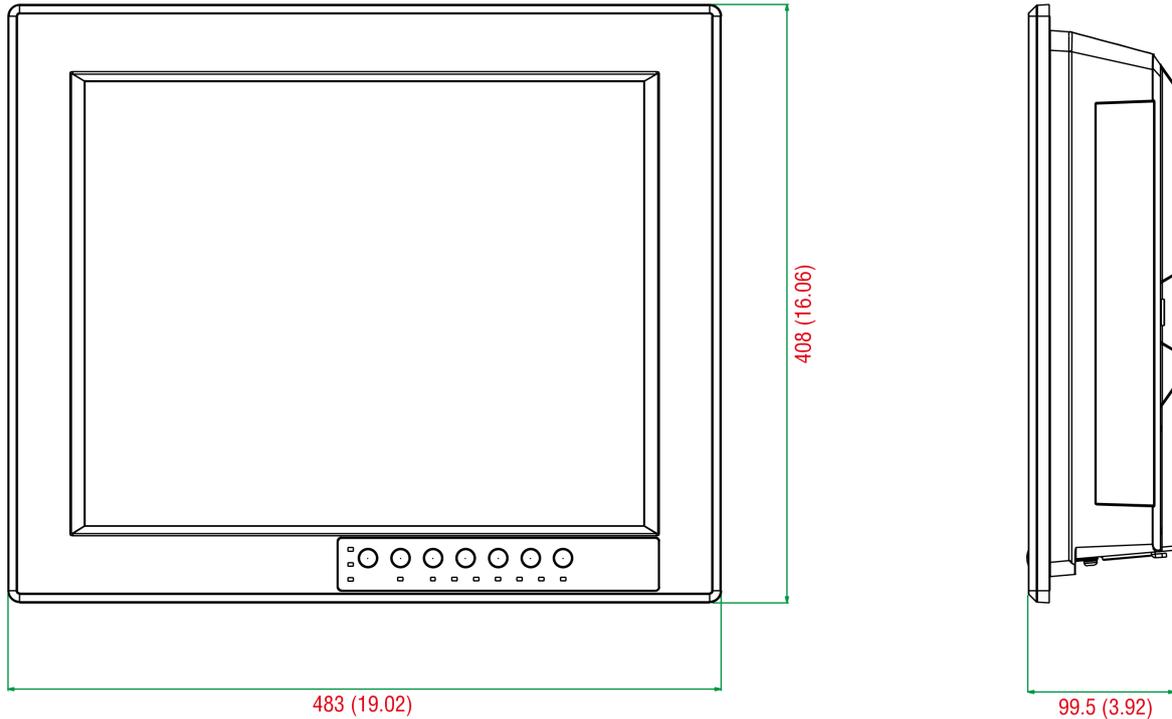
Warranty Period	LCD: 1 year System: 3 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x EXPC-1519 Series computer
Installation Kit	2 x cable gland connector 1 x connector, female, for RJ45 (EXPC-1519-C1-S3-T/C7-S3-T) 1 x connector, female, for USB (EXPC-1519-C1-S3-T/C7-S3-T) 1 x storage installation kit 1 x terminal block, 2-pin, for DC power input 1 x terminal block, 3-pin, for AC power input
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Panel	CPU	RAM	LAN	Serial	USB 2.0 Ports	Video Outputs	Interface	Power Input	IP Rating	Operating Temp.
EXPC-1519-C7-S1-T	19" (5:4) 1,000 nits	i7-3555LE	4 GB	2	2	2	1 x VGA	Cable gland, standard I/O	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C
EXPC-1519-C7-S2-T	19" (5:4) 1,000 nits	i7-3555LE	4 GB	2	2	4	1 x VGA	Cable gland, terminal block	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C
EXPC-1519-C7-S3-T	19" (5:4) 1,000 nits	i7-3555LE	4 GB	1	-	1	1 x VGA	Rugged connector	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C
EXPC-1519-C1-S1-T	19" (5:4) 1,000 nits	Celeron 1047UE	4 GB	2	2	2	1 x VGA	Cable gland, standard I/O	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C
EXPC-1519-C1-S2-T	19" (5:4) 1,000 nits	Celeron 1047UE	4 GB	2	2	4	1 x VGA	Cable gland, terminal block	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C
EXPC-1519-C1-S3-T	19" (5:4) 1,000 nits	Celeron 1047UE	4 GB	1	-	1	1 x VGA	Rugged connector	24 VDC 100-240 VAC	IP66 (completely sealed)	-40 to 70°C

Accessories (sold separately)

Panel Mounting Kits

EXPC-1519-PMTK	EXPC-1519 Panel Mounting Kit
EXPC-1519-handle	EXPC-1519 Handle Kit

Desktop Mounting Kits

EXPC-1519-DMTK	EXPC-1519 Desktop Mounting kit
----------------	--------------------------------

Wall-Mounting Kits

EXPC-1519-WMTK

EXPC-1519 Wall Mounting Kit

© Moxa Inc. All rights reserved. Updated Jun 11, 2021.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.