

DA-660A Series

Arm-based 1U rackmount industrial computers with 8 to 16 serial ports and 4 LAN ports



Features and Benefits

- MoxaMacro 500 MHz processor with 128 MB onboard RAM and 32 MB flash memory
- 8 to 16 software-selectable RS-232/422/485 serial ports
- 8 to 16 jumper-configurable 1/150 k Ω pull high/low and 120 ohm termination resistors
- 15 kV ESD protection for all serial signals
- Quad 10/100 Mbps Ethernet ports
- USB and CF slots for storage expansion
- Standard 19-inch rackmount installation, 1U height
- Wide-range 100 to 240 VAC power input
- LCM display and keypad for HMI
- Ready-to-run Linux OS platform
- Robust, fanless design
- Models with serial port isolation protection available

Certifications



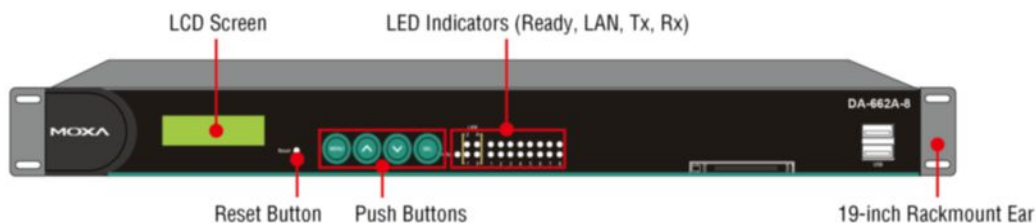
Introduction

The DA-660A Series Arm-based, ready-to-run embedded computers are designed for industrial data-acquisition applications. The computers have 8 to 16 RS-232/422/485 serial ports, 4 Ethernet ports, and 2 USB 2.0 ports, all based on the MoxaMacro communication processor. In addition, the DA-662A-I-8/16-LX's serial ports come with high-level interference protection. The housing is a standard 1U, 19-inch wide rack-mountable rugged enclosure. The robust, rack-mountable mechanism design provides the hardened protection needed for industrial environment applications, and makes it easy for users to install the DA-660A computers on a standard 19-inch rackmount.

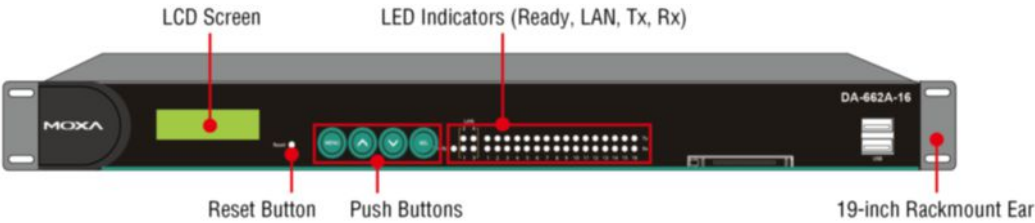
The DA-660A computers are ideal for applications that require a distributed embedded technology, such as SCADA systems, plant-floor automation, and power electricity monitoring applications.

Appearance

Front View (DA-662A-8)



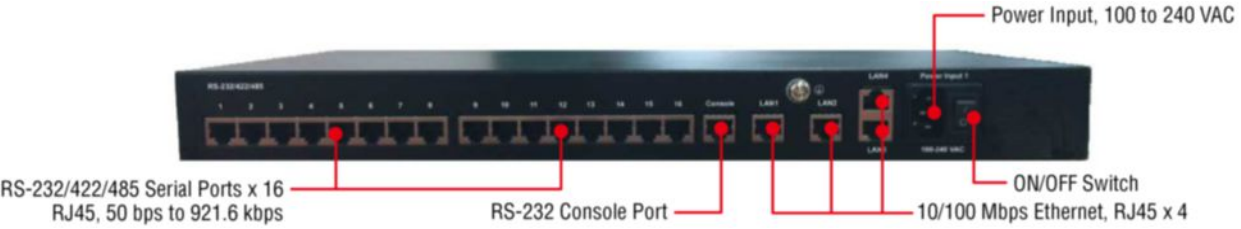
Front View (DA-662A-16)



Rear View (DA-662A-8)



Rear View (DA-662A-16)



Specifications

Computer	
CPU	MoxaMacro 500 MHz
SDRAM	128 MB
Flash	NOR Flash, 32 MB
Pre-installed OS	Linux
LCD Module	Liquid Crystal Display on the case, 2x16 text mode
Ethernet Interface	
Ethernet Ports	Auto-sensing 10/100 Mbps ports (RJ45 connector) x 4
Magnetic Isolation Protection	1.5 kV (built-in)
LED Indicators	
System	System Ready x 1
Serial	2 per port (Tx, Rx)
Serial Interface	
Serial Ports	8-port models: 8 x RS-232/422/485 16-port models: 16 x RS-232/422/485
Console Port	1 x RJ45

Serial Signals

Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	RTS/CTS, XON/XOFF, ADDC® (automatic data direction control) for RS-485, RTS Toggle (RS-232 only)
Baudrate	50 bps to 921.6 kbps
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND

Power Parameters

Input Voltage	100 to 240 VAC
Power Consumption	20 W

Reliability

Alert Tools	Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger	Built-in WDT

Physical Characteristics

Dimensions	480 x 45 x 237 mm (18.9 x 1.77 x 9.33 in)
Weight	4,300 g (9.56 lb)

Environmental Limits

Operating Temperature	-10 to 60°C (14 to 140°F)
Storage Temperature (package included)	-20 to 70°C (-4 to -158°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Vibration	1g @ IEC-68-2-6, sine wave (resonance search), 5-500 Hz, 1 Oct/min, 1 Cycle, 13 mins 17 sec per axis

Standards and Certifications

Safety	UL 60950-1
EMC	EN 61000-6-2/-6-4
EMI	CISPR 22, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 4 kV IEC 61000-4-6 CS: 3 V/m IEC 61000-4-8: 1 A/m IEC 61000-4-11
Green Product	RoHS, CRoHS, WEEE

MTBF

Time	DA-662A-8-LX: 272,913 hrs DA-662A-16-LX: 177,580 hrs DA-662A-16-DP-LX: 177,260 hrs DA-662A-I-8-LX: 268,332 hrs DA-662A-I-16-LX: 189,455 hrs
Standards	Telcordia (Bellcore) Standard

Warranty

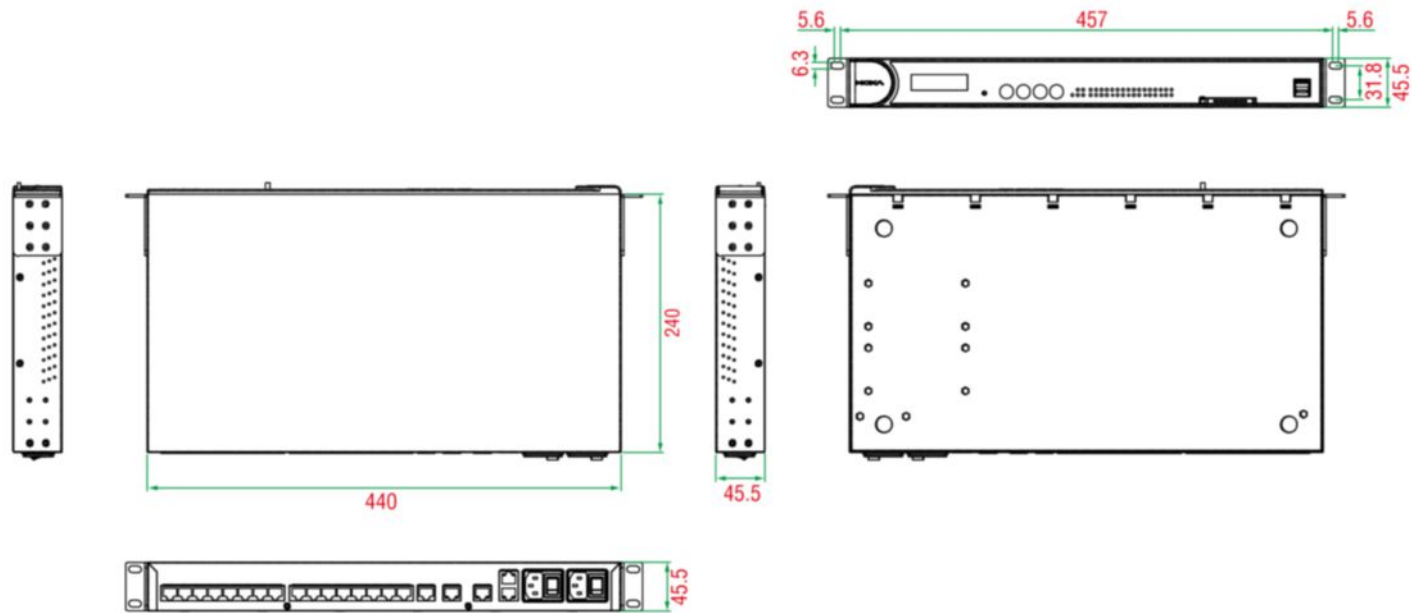
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x DA-660A Series computer
Installation Kit	1 x rack-mounting kit
Cable	1 x 8-pin RJ45 to DB9 male serial port cable, 150 cm 1 x RJ45-to-RJ45 cross-over cable, 100 cm 1 x 8-pin RJ45 to DB9 female console port cable, 150 cm 6 x jumper cap
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm



Ordering Information

Model Name	RS-232/422/485 Ports	RS-485 Serial Ports (2-Wire Only)	10/100 Mbps LAN Ports
DA-662A-8-LX	8	–	4
DA-662A-16-LX	16	–	4
DA-662A-16-DP-LX	16	–	4

Model Name	RS-232/422/485 Ports	RS-485 Serial Ports (2-Wire Only)	10/100 Mbps LAN Ports
DA-662A-I-8-LX	4	4	4
DA-662A-I-16-LX	4	12	4

Accessories (sold separately)

Power Cords

PWC-C7AU-2B-183	Power cord with Australian (AU) plug, 2.5A/250V, 1.83 m
PWC-C7CN-2B-183	Power cord with two-prong China (CN) plug, 1.83 m
PWC-C7EU-2B-183	Power cord with Continental Europe (EU) plug, 2.5A/250V, 1.83 m
PWC-C7UK-2B-183	Power cord with United Kingdom (UK) plug, 2.5A/250V, 1.83 m
PWC-C7US-2B-183	Power cord with United States (US) plug, 10A/125V, 1.83 m

Power Adapters

PWR-24270-DT-S1	Power adapter, input voltage 90 to 264 VAC, output voltage 24 V with 2.5 A DC load
-----------------	--

© Moxa Inc. All rights reserved. Updated Nov 12, 2018.

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.