ULI-314DC *BB-USR604* USB to RS-232/422/485 Isolated Converter

Orange
high-retention
USB port

Features

- Converts USB to RS-232/422/485 adding 4 ports to PCs
- 2 kV Port-to-Port Isolation
- ESD 8 kV Contact, 15 kV Air Protection
- High retention USB ports hold connections securely
- USB 2.0 (backward compatible), up to 480 Mbps USB data rate
- Up to 921.6 kbps serial data rate
- Rugged Metal Case and Wide Operating Temperature (-40 to 80°C)
- UL Class 1/Division 2
- USB cable included

Introduction

Model ULI-314DC USB to serial converters allow you to add four RS-232/422/485 ports to your PC. Built to rugged specifications, the ULI-314DC offer 2 kV port-to-port isolation. This means that your upstream PC is isolated from the downstream serial devices and the downstream serial devices are isolated from each other and the upstream PC. Heavy duty metal enclosure with panel and DIN rail mounting options, high ESD protection and wide operating temperatures, make them ideal for use in harsh environments.

Specifications

Serial & Isolation Technology

- Modes   RS-232, RS-422 4-wire, RS-485 2 & 4-wire

Model #:	Connector:	Data Rate:	Protection:			Industrial Bus:	LEDs:
			Isolation	ESD	Surge		
ULI-314DC	(4) DB9 male	921.6 kbps	2kv	15 kV Air, 8 kV Contact	±0.5k V$_{DC}$ ports. ±1kV signal ports.	Modbus	TD, RD, PWR

USB Technology

Model #:	USB Port Connector:	Data Rate:	Standard:
ULI-314DC	USB Type B female, high retention – 3.4 lb (15N) pull force	1.5, 12, 480 Mbps	1.1, 2.0

* Backward compatible

Environmental

Model #:	Operating Temperature:	Storage Temperature:	Operating Humidity:
ULI-314DC	-40 to +85 °C	-40 to +85 °C	95%, non-condensing

Power

Model #:	Source:	Input Voltage:	Consumption:
ULI-314DC	External PSU (not included, sold separately) Dual Inputs - terminal block, locking barrel plug	10-48 Vdc	4.5W

Mechanical

Model #:	Enclosure, Mounting:	Dimensions, mm:	USB Cable, included, length:	Weight, gm, w/cable:
ULI-314DC	IP30 metal, DIN rail or Panel	203 x 35 x 120	1.8 m	748.04

Software

Model #:	
ULI-314DC	Windows 11, 10 (32/64 bit), Server 2016, Server 2019
	Linux (Ubuntu 11.10, Kernel version 3.0.0)

Meantime Between Failures (MTBF)

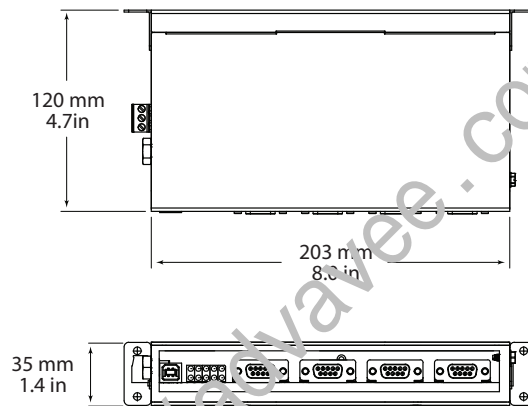- Calculation Method   MIL217F Parts Count Reliability Prediction

Model #:	Hours:
ULI-314DC	72,749

Regulatory/Approvals/Certifications

Model #:		CE Directives:	CE Standards:
ULI-314DC	FCC, UL C1/D2 #E245458	2014/30/EU – Electromagnetic Compatibility 2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances (RoHS) 2012/19/EU – Waste Electrical & Electronic Equipment (WEEE)	EN 55032 Class A – Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN 55024 – Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement EN 61000-6-4 A1 – Generic Emission Standard for (heavy) Industrial Environments (Class A) EN 61000-6-2 – Generic Immunity Standards for (heavy) Industrial Environments

Dimensions
Unit = mm / in

120 mm
4.7in

203 mm
8.0 in

35 mm
1.4 in

Ordering Information

Model Number	Part Number to Order	Description
ULI-314DC	BB-USR604	USB to RS-232/422/485 Converter – 2 kV Isolation, High-retention USB to (4-port) Serial DB9 male, UL C1/D2