

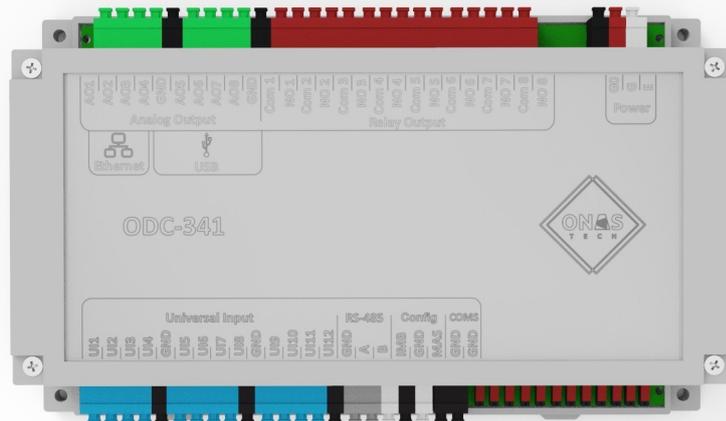


# TECHNICAL DATASHEET

## ODC-341 BMS Controller

### Introduction

Welcome to ONAS-TECH: Your Gateway to Cutting-Edge Electronics Solutions.



At ONAS-TECH, we are committed to reshaping the electronics industry landscape. With a foundation built on pioneering technological advancements, ONAS-TECH stands as your reliable partner for innovative and energy-efficient electronic solutions. As we embark on a mission to revolutionize the way electronics are perceived and utilized, we invite you to explore our latest product offerings and join us in shaping the future of technology together.

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For Technical support, please contact us: [support@onastech.com](mailto:support@onastech.com)

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## Overview

**ODC-341 Provide communication to BACnet and Modbus systems. It can act as a gateway between BACnet/IP, BACnet/MSTP and Modbus networks. It is fully programmable with a graphical programming language supporting HVAC functions, time scheduling, alarms and histories. it has been built using Sedona Framework™.**

In a BACnet system, devices can be connected to different physical network such as Ethernet and RS485. In order to communicate across these physical networks, a BACnet router is required and each physical network is given a unique network number in the range 1 to 65535. In addition to the network numbers, each device on the network must be given a unique device ID in the range 0 to 4194303 regardless of the physical network that it is located in. These 3 settings are the bare minimum settings that require to be changed.

The API provides an interface for communicating to BACnet and Modbus Systems.

The OBIX API provides an easy way to integrate into Niagara or any other system that supports OBIX.

The following features of the OBIX Version 1.1 specification are supported

- Reading and Writing of values.
- Subscribing to real time data for returnin COV's using the OBIX Watch.
- Histories for returning time stamped data.
- Alarms for returning time stamped events.

## Controller Framework

it has been built using Sedona Framework™ Powered by Tridium Niagara.

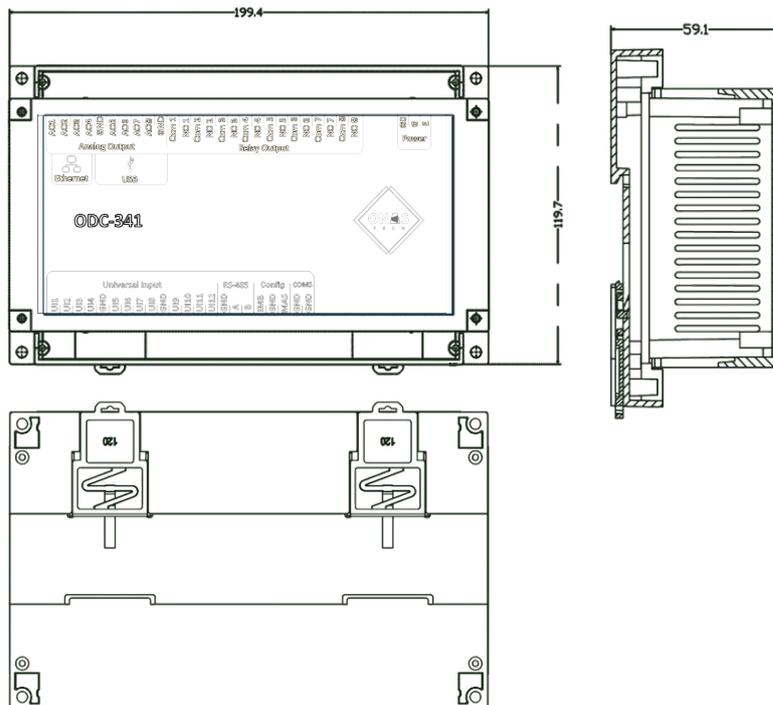
## ODC 341 points

The ODC-341 is a versatile controller featuring 12 universal inputs, 8 analog outputs, and 8 relay outputs. It is designed to handle a total of 300 software and hardware points, making it suitable for complex automation and control applications.



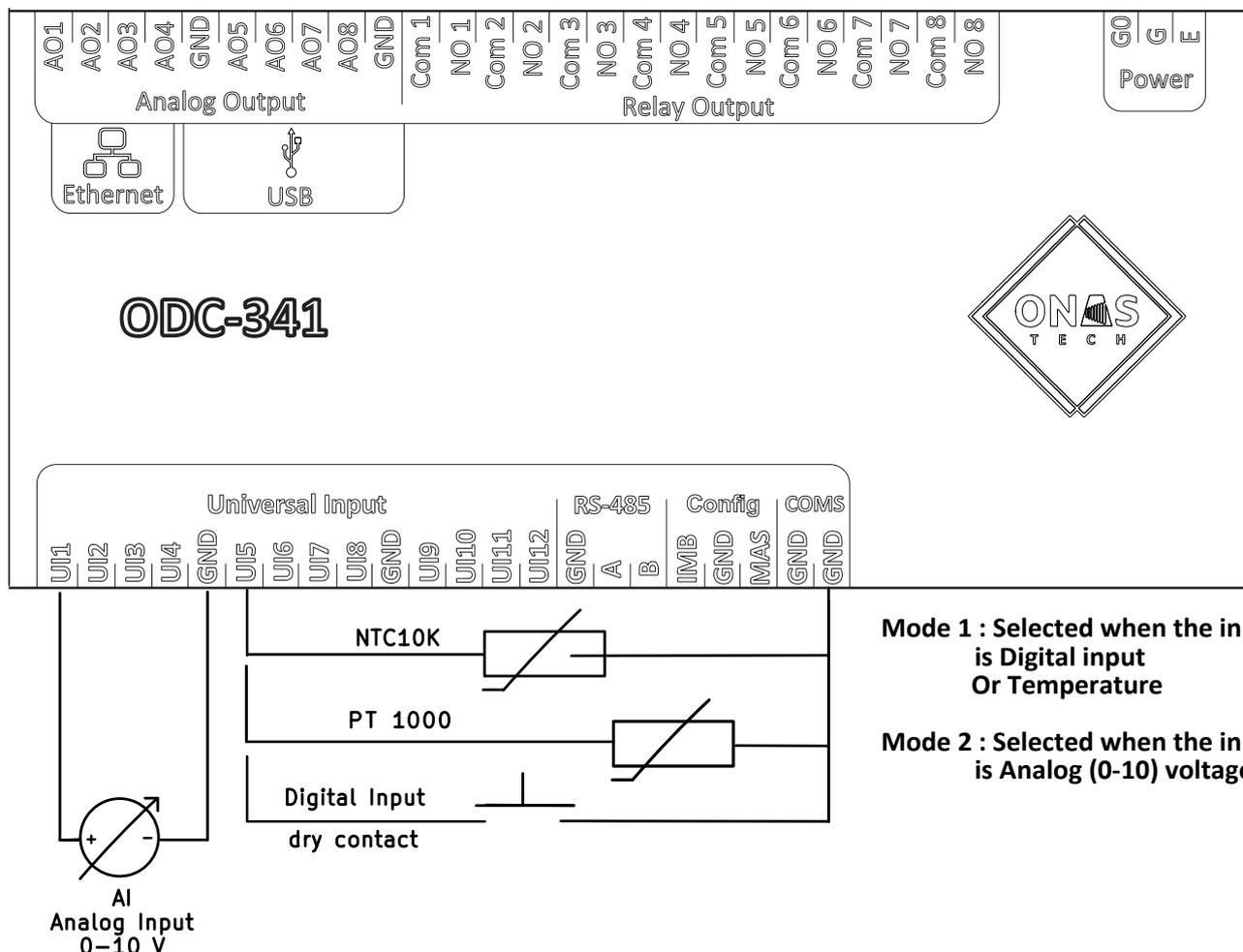
# Technical Specifications

Features	<ul style="list-style-type: none"> <li>• 1.2 GHZ ARM CORTEX-A53 Processor</li> <li>• 1GB DDR3 RAM</li> <li>• 8GB pSLC SD Card on-board flash storage</li> <li>• extensible with industrial grade microSD</li> <li>• One 1 Gigabit Ethernet ports</li> <li>• Four USB 2.0 port / Wifi a/b/n</li> <li>• RTC built-in</li> </ul>
Power Input / Power Cons.	<b>24 V AC ±20% or 24~30 V DC / 10 VA</b>
Chassis	<ul style="list-style-type: none"> <li>• Height: 59.1 mm</li> <li>• Width: 119.7 mm</li> <li>• Length: 199.4 mm</li> <li>• Mounting Holes: support mounting holes</li> <li>• Weight: 650 gm</li> </ul>
Environmental Conditions	<ul style="list-style-type: none"> <li>• Temperature: 40 to 140 F (0 to 60 C)</li> <li>• Humidity: 10-90% Relative, noncondensing -10 to 150 F (-23 to 66 C)</li> <li>• Storage Temperature: -10 to 150 F (-23 to 66 C)</li> <li>• Storage Humidity: 0-95% Relative, noncondensing</li> </ul>
Agency listings	• compliant with FCC part 15 Class A.
Protocols	<ul style="list-style-type: none"> <li>• <b>BACnet /IP</b></li> <li>• <b>BACnet /MSTP</b></li> <li>• <b>Modbus TCP Client</b></li> <li>• <b>Modbus RTU Master</b></li> <li>• <b>REST API</b></li> </ul>
Compliance	<ul style="list-style-type: none"> <li>• Approval from the ministry of industry in Egypt.</li> <li>• Complied to IEC 63044-5-1 &amp; IEC 63044-5-2 requirements which are equivalent to the following: <ul style="list-style-type: none"> <li>- <b>UL 916 requirements.</b></li> <li>- <b>EN 50491-11 requirements.</b></li> </ul> </li> </ul>



# Technical Specifications

Property	Description	
Input Voltage	24V AC $\pm$ 20%	
Frequency	50Hz/60Hz for the AC input voltage	
12 Universal Inputs	12UIs can be used as analog inputs with resolution 12bits	<b>Analog inputs (Mode 2)</b> Using terminal GND and Any universal input 0...10 VDC 0(2) ...10 VDC <b>Digital inputs (Mode 1)</b> Using terminal GND and Any universal input <b>Temperatures (Mode 1)</b> Using terminal GND and any universal Input NTC10k $\Omega$ (-30...+100 °C) PT1000-1 (-50...150 °C)
8 Analog outputs	8 AO Terminals A1-----A8 +GND (Analog out)	0...10 VDC / $\pm$ 1 mA
8 Relay outputs	8 relay outputs O1-C1.....O8-C8	Changeover relays Voltage: 19...250 VAC, 1...29 VDC max. total current: 2 A per channel



# Order Information

Feel free to contact us about your situation to select the best solution ODC-341 BMS Controller

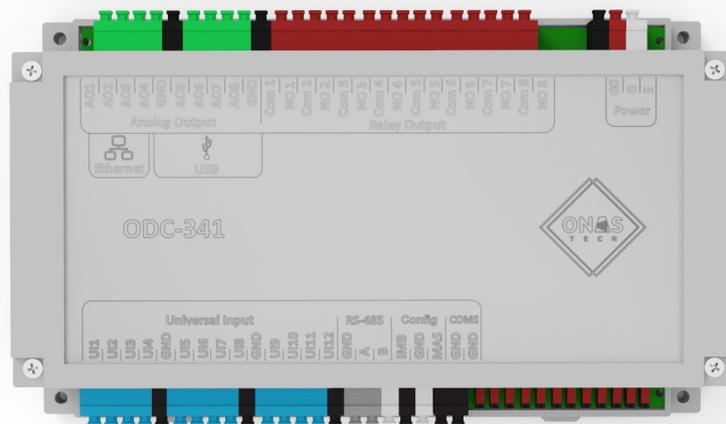
<b>ODC-341</b>	<b>Power</b>		
	24 V AC $\pm$ 20%		
	<b>Onboard points</b>		
	<b>Analog Outputs</b>	<b>Relay Outputs</b>	<b>Universal Inputs</b>
	8	8	12
	<b>Communication Protocols</b>		
	BACnet /IP BACnet /MSTP Modbus TCP Client Modbus RTU REST API		

# Contact us

For all inquiries regarding information and technical support, we kindly request that you direct your correspondence to our dedicated team. Our representatives are available to assist you via email at: [support@onastech.com](mailto:support@onastech.com)

Or visit our website [www.onastech.com](http://www.onastech.com)

We look forward to resolving your inquiries promptly and professionally.



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Onastech, 2024  
 Technical specifications and availability subject to change without notice.