

OMEGA iServer 2 Virtual Chart Recorder and Webserver User Guide



Contents

1 iServer 2 Series

1.1 Virtual Chart Recorder and Webserver

1.1.1 Introduction

1.1.2 Materials

1.1.2.1 Included with your iServer 2

1.1.2.2 Additional Materials Needed

1.1.2.3 Optional Materials

1.1.3 Hardware Assembly

1.1.4 Sensing Device Setup

1.1.5 Thermocouple Connection

1.1.6 M12 Smart Probe Connection

1.1.7 Smart Probe Configuration with SYNC

1.1.8 Digital I/O and Relays

1.1.9 Powering the iServer 2

1.1.10 Power Over Ethernet

1.1.11 Connecting the iServer 2 to your PC

1.1.12 Method 1 – DHCP Setup

1.1.13 Method 2 – Direct to PC Setup – RJ45 (Ethernet)

1.1.14 Method 3 – Direct to PC Setup – Micro USB 2.0

1.1.15 iServer 2 Web UI

1.1.16 WARRANTY/DISCLAIMER

1.1.17 RETURN REQUESTS/INQUIRIES

2 Documents / Resources

2.1 References

3 Related Posts

iServer 2 Series

Virtual Chart Recorder and Webserver



omega.com/contact-us

Toll-Free: 1-[800-826-6342](tel:800-826-6342)

(USA & Canada only)

Customer Service: 1-[800-622-2378](tel:800-622-2378)

(USA & Canada only)

Engineering Service: 1-[800-872-9436](tel:800-872-9436)

(USA & Canada only)

Telephone: [203-359-1660](tel:203-359-1660)

Fax: [203-359-7700](tel:203-359-7700)

Email: info@omega.com

For other locations visit:

omega.com/worldwide

Introduction

Use this quick start guide with your iServer 2 series Virtual Chart Recorder and Webserver for quick installation and basic operation. For detailed information, refer to the User's Guide.

Materials

Included with your iServer 2

- iServer 2 series unit
- DC power supply
- 9 V battery
- DIN rail bracket and Philips screws
- RJ45 Ethernet cable (for DHCP or Direct to PC setup)
- Probe mounting bracket and standoff extenders
- (Smart Probe models only)
- K-Type Thermocouples (included with-DTC models)

Additional Materials Needed

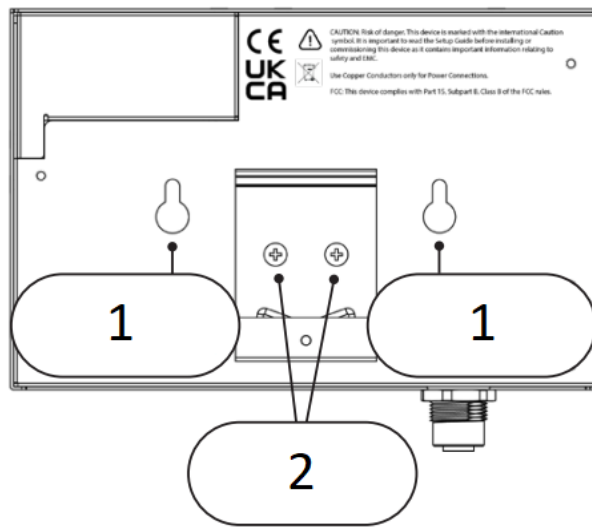
- Omega Smart Probe for M12 model (Ex: SP-XXX-XX)
- Small Philips screwdriver (for included brackets)

Optional Materials

- Micro USB 2.0 cable (For Direct to PC setup)
- DHCP-Enabled Router (For DHCP setup)
- PC running SYNC (For Smart Probe Configuration)
- PN#: M12-MT-079-2F iServer 2 splitter cable for dual-Smart Probe functionality

Hardware Assembly

All models of the iServer 2 are wall-mountable and come with an optional DIN rail bracket. The distance between the two wall-mount screw holes is 2 $\frac{3}{4}$ " (69.85 mm). To attach the DIN rail bracket hardware, locate the two screw holes on the underside of the unit and use the two included screws to secure the bracket in place as indicated in the figure below:



1. Wall-mount screw hole
2. DIN Rail Bracket

The iS2-THB-B, iS2-THB-ST, and iS2-THB-DP come with an optional Smart Probe Bracket. Locate the two screw holes on the left side of the unit and screw in the standoff extenders, then align the bracket with the extenders and use the two included screws to secure the bracket in place.

Sensing Device Setup

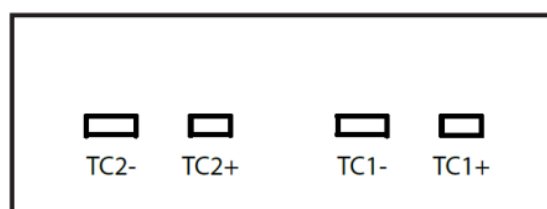
The sensing device setup will vary for the smart probe and thermocouple variants of the iServer 2.

Thermocouple Model	M12 Smart Probe Models
<ul style="list-style-type: none"> iS2-THB-DTC 	<ul style="list-style-type: none"> iS2-THB-B
	<ul style="list-style-type: none"> iS2-THB-ST
	<ul style="list-style-type: none"> iS2-THB-DP

Refer to either the section titled **Thermocouple Connection** or **M12 Smart Probe Connection** to complete the sensing device setup.

Thermocouple Connection

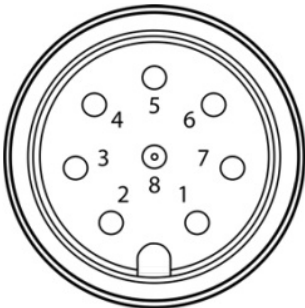
The **iS2-THB-DTC** can accept up to two thermocouples. Refer to the thermocouple connector diagram below to properly connect your thermocouple sensor to the iServer 2 unit.



M12 Smart Probe Connection

The **iS2-THB-B**, **iS2-THB-ST**, and **iS2-THB-DP** can accept Omega Smart Probes through an M12 connector.

Begin by connecting the Smart Probe(s) to a compatible M12 8-pin extension or splitter cable, then plug that cable in to the iServer 2 M12 connector. If the user has an Omega PN#: M12-MT-079-2F iServer 2 splitter cable and an additional, compatible Smart Probe, they may now connect the splitter cable with both Smart Probes attached.



Pin	Function
Pin 1	I2C-2_SCL
Pin 2	Interrupt Signal
Pin 3	I2C-1_SCL
Pin 4	I2C-1_SDA
Pin 5	Shield Ground
Pin 6	I2C-2_SDA
Pin 7	Power Ground
Pin 8	Power Supply

Important: It is recommended that users access the digital I/O provided by the iServer 2 instead of the connected Smart Probe. Using the digital I/O of the Smart Probe may cause device operation errors.

Smart Probe Configuration with SYNC

Smart Probes can be configured through Omega's SYNC configuration software. Simply launch the software on a PC with an open USB port, and connect the Smart Probe to the PC using an Omega Smart Interface, such as the IF-001 or IF-006-NA.

Important: A Smart Probe firmware update may be required for proper operation of the sensing device.

For additional information regarding the configuration of your Smart Probe, refer to the user's documentation associated with your Smart Probe model number. SYNC configuration software can be downloaded for free at: <https://www.omega.com/en-us/data-acquisition/software/sync-software/p/SYNC-by-Omega>

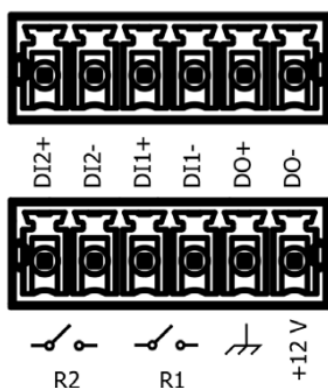
Digital I/O and Relays

Use the provided terminal block connector and the connector diagram below to wire Digital I/O and Relays to the iServer 2.

The **DI** connections (DI2+, DI2-, DI1+, DI1-) accept a 5 V (TTL) input.

The **DO** connections (DO+, DO-) require an external voltage and can support up to 0.5 amps at 60 V DC.

The **Relays** (R2, R1) can support a load of up to 1 amp at 30 V DC.



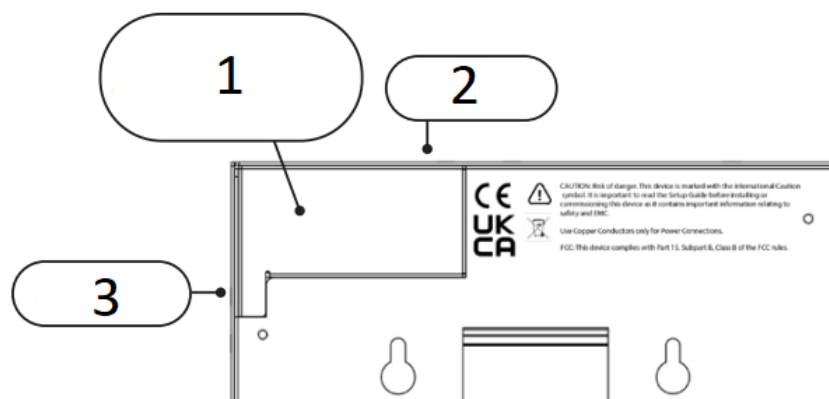
Important: When wiring the included terminal block connector to access the digital I/O, alarms, or relays, it is recommended that users ground the unit by connecting a wire to the chassis ground of the connectors shown in the diagram above.

Further configuration regarding Normally Open/Normally Closed Initial State or Triggers can be completed in the iServer 2 web UI. For more information, refer to the User's Manual.

Powering the iServer 2

LED Color	Description
OFF	No power applied
Red (blinking)	System rebooting
Red (solid)	Factory Reset – Press and hold the reset button for 10 seconds to reset the iServer 2 to factory default. WARNING: The factory reset will reset all stored data and configuration
Green (solid)	iServer 2 is connected to the Internet
Green (blinking)	Firmware update in progress WARNING: Do not unplug power while the update is in progress
Amber (solid)	iServer 2 is not connected to the Internet

All iServer 2 variants come with a DC power supply, international power supply adapters, and 9 V battery. To power the iServer 2 using the DC power supply, plug in the power supply to the DC 12 V port located on the iServer 2. To access the 9 V battery compartment, remove the two screws indicated in the following figure and gently pry open the battery compartment.



1. Battery Compartment
2. Screw 1
3. Screw 2

Insert the 9 volt battery and secure the screws again. The battery will serve as a backup power source in case of a power outage.

Once the device is powered on and fully booted up, readings will appear on the display.

Power Over Ethernet

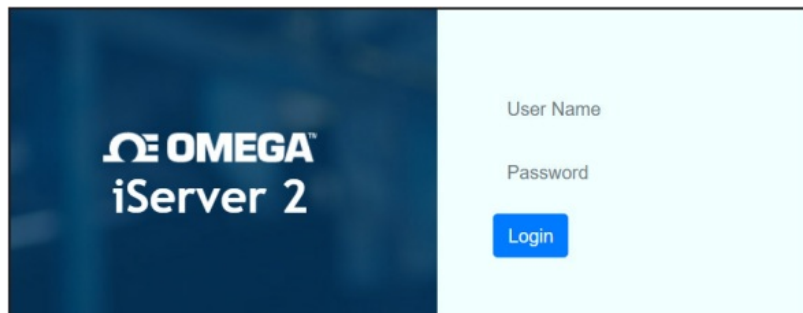
The iS2-THB-DP and iS2-TH-DTC support Power over Ethernet (PoE). A PoE injector that conforms to the IEEE

802.3AF, 44 V – 49 V, Power Consumption under 10 W specifications of the iServer 2 can be purchased separately through Omega Engineering or an alternate supplier. Units with the PoE feature can also be powered by a PoE Switch or a Router with PoE support. Refer to the User's Manual for more information.

Connecting the iServer 2 to your PC

Important: Administrator access to the PC may be required to change the PC Network Properties. iServer 2 can automatically check for firmware updates when connected to the Internet. Internet access is highly recommended.

There are 3 methods to access the iServer 2 webserver.



A successful setup will result in the user accessing the webserver login page. Refer to the applicable connection method below.

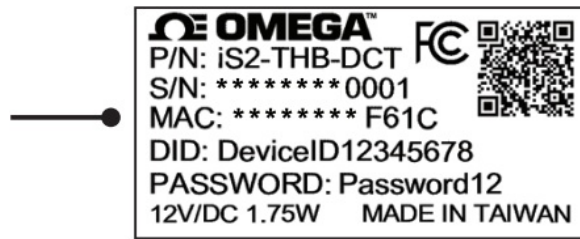
Important: If the user is unable to access the iServer 2 webserver UI through the DHCP method, the Bonjour Service may need to be installed. The service can be downloaded from the following URL:
<https://omegaupdates.azurewebsites.net/software/bonjour>

Method 1 – DHCP Setup

Connect your iServer 2 directly to a DHCP-enabled router using an RJ45 cable. On the display model, the assigned IP address will appear on the lower right of the device display. Open a web browser and navigate to the assigned IP address to access the web UI.

Method 2 – Direct to PC Setup – RJ45 (Ethernet)

Connect your iServer 2 directly to your PC using an RJ45 cable. Identify the **MAC address** assigned to your iServer 2 by checking the label on the backside of the device.



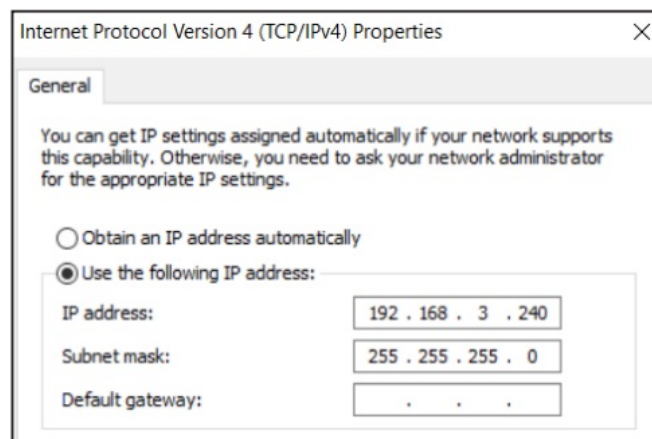
Open a web browser and enter the following URL to access the web UI:

<http://is2-omegaXXXX.local>

(the XXXX should be replaced by the last 4 digits of the MAC address)

Method 3 – Direct to PC Setup – Micro USB 2.0

Connect your iServer 2 directly to your PC using a micro USB 2.0 cable. Navigate to the **Windows Control Panel**, click **Network and Sharing Center**, click the **Unidentified Network Connection**, and click **Properties**. Click **TCP/IPv4 Properties**.



Fill out the field for the IP address with the following:

192.168.3.XXX

(the XXX can be any value that is **NOT** 200)

Fill the Subnet Mask field with the following:

255.255.255.0

Click OK to finalize, and reboot the PC.

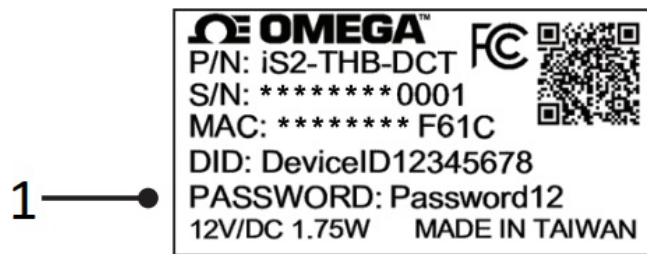
Open a web browser and navigate to following address to access the web UI:

192.168.3.200

iServer 2 Web UI

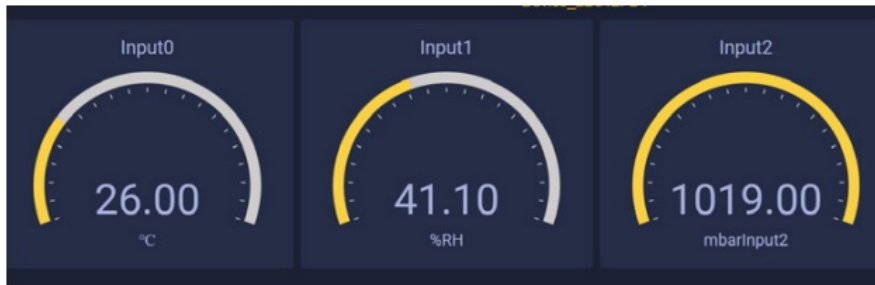
Users who are signing in for the first time or have not changed the login credentials can type in the following information to login:

Username: **admin**



1. The password is provided on a label on the back of the physical unit.

Once logged in, the web UI will display the sensor readings as different gauges.



From the web UI, users can configure Network settings, Logging settings, Events & Notifications, and System settings. Refer to the iServer 2 User's Manual for more information regarding how to access and utilize these features.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in

our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

<p>FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:</p> <ol style="list-style-type: none">1. Purchase Order number under which the product was PURCHASED,2. Model and serial number of the product under warranty, and3. Repair instructions and/or specific problems relative to the product.	<p>FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:</p> <ol style="list-style-type: none">1. Purchase Order number to cover the COST of the repair or calibration,2. Model and serial number of the product, and3. Repair instructions and/or specific problems relative to the product.
---	--

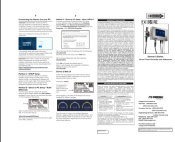
OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a trademark of OMEGA ENGINEERING, INC.

© Copyright 2019 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

MQS5839/0224

Documents / Resources

	<p>OMEGA iServer 2 Virtual Chart Recorder and Webserver [pdf] User Guide iServer 2 Virtual Chart Recorder and Webserver, iServer 2, Virtual Chart Recorder and Webserver, Chart Recorder and Webserver, Recorder and Webserver, Webserver</p>
---	---

References

- [Global Presence | Omega Engineering](#)
- [Omega Firmware Update](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.