PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough **User Manual**





intellinet-network.com

All trademarks and trade names are the property of their respective owners. © IC Intracom. All rights reserved. Intellinet Network Solutions is a trademark of IC Intracom, registered in the U.S. and other countries.

No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or scanning, for any purpose other than the personal use by the purchaser of this product. IC Intracom assumes no responsibility for any errors that may appear in this document.

Whereas reasonable effort has been made to make the information in this document as useful and accurate aspossible. IC Intracom assumes no responsibility for the application, usefulness, or completeness of the information contained herein. Under no circumstance will IC Intracom be responsible or liable for any damages or losses including direct, indirect, special, incidental, or consequential damages or losses arising from either the use of any information contained within this manual or the use of any products or services referenced in this manual.

IC Intracom reserves the right to change any product's features, specifications, documentation, warranties, fee schedules, and conditions at any time and without notice.

This manual provides information about using Intellinet Network Solutions PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough [562034 / IPS-6GM02-60W]

READER OBJECT

- Network Engineer
- Technical Promotion Personnel
- Network Administrator

TECHNICAL SUPPORT

Intellinet Website intellinet-network.com

MANUAL DETAILS

Command line format Convention

The meaning of the command line format is explained below:

Bold: the command line keywords (the parts that must be input as they remain unchanged in the command) areexpressed in bold font.

Italics: command line parameters (parts of the command that must be replaced by actual values) are expressed in italics.

[]: indicates the part enclosed by [], which is optional during command configuration.

 $\{x \mid y \mid ...\}$: Indicates that one of two or more options is selected.

[x | y | ...]: Indicates to select one or none of two or more options.

//: a line starting with a double slash is represented as a comment line.

Description

- Some port types illustrated in this manual may be inconsistent with the actual situation. In actual operation, it is necessary to configure according to the port types supported by each product.
- The display information illustrated in this manual may contain the contents of other product series (such as product model, description, etc.), and the specific display information shall be subject to the actual equipment information.





TABLE OF CONTENTS

| INTRODUCTION | 5 |
|---|----|
| PRODUCT OVERVIEW | 5 |
| FEATURES | 5 |
| EXTERNAL COMPONENT DESCRIPTION | 6 |
| FRONT PANEL | 6 |
| REAR PANEL | 6 |
| PACKAGE CONTENTS | 6 |
| INSTALLING THE SWITCH | 7 |
| DESKTOP INSTALLATION | 7 |
| WALL MOUNTING | 7 |
| CONFIGURATION GUIDE | 8 |
| CONNECTING TO POWER | 8 |
| CONNECTING TO POWER | 8 |
| LOGGING INTO THE SWITCH | 9 |
| WEB SMART CONFIGURATION | 12 |
| HOMEPAGE | 12 |
| SYSTEM SETTINGS | 12 |
| DEVICE INFO | 12 |
| IP SETTINGS | 12 |
| WEB SETTINGS | 13 |
| TELNET SETTINGS | 13 |
| USER MANAGEMENT | 13 |
| UPGRADE | 13 |
| MONITORING | 14 |
| PORT STATISTICS | 14 |
| CABLE DIAGNOSTICS | 14 |
| LOOP GUARD (PART OF OUR SELF-HEALING NETWORK SUITE) | 14 |
| | 15 |
| SWITCH SETTINGS | 15 |
| PORT SETTINGS | 15 |
| PORT MONITORING | |
| PORT ISOLATION | |
| JUMBO FRAME | |
| GREEN ENABLE | 16 |
| | |
| | |





PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

| FILTER MAC17 |
|---|
| SEARCH MAC17 |
| MAC LIST |
| DHCP SNOOPING |
| VLAN SETTINGS |
| VLAN MEMBER |
| VLAN SETTINGS |
| QOS SETTINGS |
| PORT RATE |
| STORM CONTROL |
| QOS (QUALITY OF SERVICE) PROPERTY20 |
| COS PRIORITY MAPPING |
| DSCP PRIORITY MAPPING |
| INNER PRIORITY MAPPING |
| QUEUE SCHEDULING |
| POE SETTINGS |
| POE GLOBAL INFO22 |
| POE BASIC SETTINGS |
| PDM (POWERED DEVICE MONITOR) A POE WATCHDOG FEATURE |
| ONVIF (OPEN NETWORK VIDEO INTERFACE FORUM) |
| APPENDIX: TECHNICAL SPECIFICATIONS |



INTRODUCTION

Thank you for purchasing the Intellinet Network Solutions PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough. Before you install and use this product, read this manual carefully for a full understanding of its functions.

PRODUCT OVERVIEW

This Web Smart Managed PoE Switch features 6 RJ45 ports with speeds of 10/100/1000Mbps. Each port supports automatic MDI/MDIX rollover and wire-speed forwarding. Ports 1-4 offer PoE power supply per IEEE 802.3af/at standards, serving as power sources for compatible devices. The switch utilizes storage and forwarding technology with dynamic memory allocation to effectively allocate bandwidth to each port. It offers user-friendly interface, enabling flexible expansion of home and office networks without being limited by power line layouts. It's easy to manage and maintain, adapting to diverse scenario requirements.

Web Smart refers to the device web management system, that is, the web management system that manages or configures the device, and manages the device by accessing Web Smart using a browser (such as Chrome).

Web management includes two parts: Web server and Web client. The Web server is integrated on the device to receive and process the requests sent by the client and return the processing results to the client. The Web client usually refers to the browser, such as Chrome, IE and FF.

FEATURES

- Supports IEEE 802.3, IEEE802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3p, IEEE 802.3q, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z.
- Power budget of 60 W.
- Supports PoE power up to 30 W for each PoE port.
- Supports MAC address auto-learning and auto-aging.
- Six 10/100/1000 Mbps self-adapting RJ45 ports
- Six gigabit RJ45 ports to link to higher-bandwidth equipment upstream.
- Store and forward switching architecture.
- Web-based management support.
- LED indicators for monitoring power, link/activity and PoE.





EXTERNAL COMPONENT DESCRIPTION

FRONT PANEL

The front panel of the Switch consists of six Gigabit ports; four are PoE-enabled and two are Gigabit uplink ports. Each of the four PSE ports (Ports 1-4) can provide up to 30 watts (with total capacity of up to 60W); non-PoE devices only receive data.

Reset button (Reset):

To reset the Switch press the button.

LED indicators:

The LED indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the switch, its connection or attached devices.

The following chart shows the LED indicators of the switch along with explanation of each indicator.

| LED | COLOR | STATUS | STATUS DESCRIPTION |
|------------|----------------|----------|--|
| DWD | Oreners | On | Power is supplied via the AC adapter or the PD port. |
| PWR Orange | | Off | No power is supplied to the switch |
| | | On | A network link has been established |
| LINK/ACT | LINK/ACT Green | Flashing | A network link has been established and data packets are being sent and received |
| | | Off | No network link is established |
| | | On | Port is supplying power to a connected PoE device. |
| POE | Orange | Flashing | Abnormal power supply |
| | | Off | Port is not supplying power to a connected PoE device. |

REAR PANEL

The rear panel of the Switch contains one grounding terminal and an AC power connector as shown. **AC Power Connector:**

Power is supplied through an external AC power adapter. It supports 100 – 240 V AC, 50/60 Hz.

Grounding Terminal:

Wire the grounding terminal to an object that provides earth grounding (in rackmount installations, grounding is typically provided by the metal frame of the mounting rack), which is located on the side of the power supply connector.

PACKAGE CONTENTS

Before installing the Switch, make sure that the following packing list matches the items in the packaging. If any part is lost and damaged, please contact your place of purchase as soon as possible. In addition, make sure that you have the tools to install switches and cables on hand.

- PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough
- Quick Instruction Guide
- AC Power Cord





This section describes how to install your Switch and make connections to it. Review the following topics and perform the procedures in the order being presented.

Use the following instructions to avoid incorrect installation, which could damage the Switch or void the warranty.

- Place the Switch on stable surface that can safely hold the switch and any related equipment.
- Make sure the Switch will be connected to power in the proper AC input range (refer to the switch label).
- Avoid electric shock do not open the Switch housing, even if the switch is disconnected from power.

• Make sure that there is proper clearance on all sides of the Switch for proper heat dissipation and adequate ventilation.

DESKTOP INSTALLATION

When installing the Switch on a desktop, allow adequate space for ventilation between the device and the objects around it. Be sure to place the switch on a stable surface that can support the weight of the switch and any other components that may be placed on it.

WALL MOUNTING

First, install screws (not included) into the wall at appropriate distances. Then, hang the unit on the screws and slide it into place so it is secure.





PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

CONFIGURATION GUIDE

This section provides an introduction to the web-based configuration utility, and covers the following topics:

- Powering on the device
- Connecting to the network
- Starting the web-based configuration utility

CONNECTING TO POWER



Power down and disconnect the power cord before servicing or wiring a switch.

Do not disconnect modules or cabling unless the power is first switched off. The device only supports the voltage outlined in the type plate. Do not use any other power components except those specifically designated for the switch.



Disconnect the power cord before installation or cable wiring.

Connect the AC power connector on the back panel of the switch to the external power source with the included power cord, and check the power LED is on.

CONNECTING TO NETWORK

To connect the switch to the network:

- 1 Connect an Ethernet cable to the Ethernet port of a computer
- **2** Connect the other end of the Ethernet cable to one of the numbered Ethernet ports of the switch. The LED of the port lights if the device connected is active.
- 3 Repeat Step 1 and Step 2 for each device to connect to the switch.



We strongly recommend using CAT5E or better cable to connect network devices. When connecting network devices, do not exceed the maximum cabling distance of 100 meters (328 feet). It can take up to one minute for attached devices or the LAN to be operational after it is connected. This is normal behavior.

Connect the switch to end nodes using a standard Ethernet cable (UTP/STP) to connect the switch to end nodes.



Switch ports will automatically adjust to the characteristics (MDI/MDI-X, speed, duplex) of the device to which the switch is connected.





LOGGING INTO THE SWITCH

This section describes how to navigate the web-based switch configuration utility. Be sure to disable any pop-up blocker.

LAUNCHING THE CONFIGURATION UTILITY

To open the web-based configuration utility:

- 1 Open a Web browser.
- **2** Enter the IP address of the device you are configuring in the address bar on the browser (factory default IP address is 192.168.2.1) and then press Enter.

After a successful connection, the login window displays.



LOGGINIG IN

To log in to the device configuration utility:

- 1 Enter the default user ID and the default password.
- **2** If this is the first time that you logged on with the default user ID and the default password it is recommended that you change your password immediately.
- 3 When the login attempt is successful, the System Information window displays.

| PARAMETER | DEFAULT VALUE |
|--------------------|---------------------------------|
| Default IP address | 192.168.2.1 |
| Default Username | admin |
| Default Password | the serial number of the Switch |

If you entered an incorrect username or password, an error message appears and the Login page remains displayed on the window.

By default, the application logs out after five minutes of inactivity.



To logout, click Logout in the top right corner of any page. The system logs out of the device.

When a timeout occurs or you intentionally log out of the system, a message appears and the Login page appears, with a message indicating the logged-out state. After you log in, the application returns to the initial page.



PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

WEB-BASED SWITCH CONFIGURATION

The WebSmart switch software provides Layer 2 functionality for switches in your networks. This chapter describes how to use the web-based management interface (Web UI) to configure the switch's features.

For the purposes of this manual, the user interface is separated into three sections, as shown in the following figure:

| ØINTELLINET | | | English ~ Log |
|------------------------|------------------|--------------------------|---------------|
| Homepage | | | |
| System Settings 🛛 🗸 | | 1 2 3 4 5 6 Electric | |
| Monitoring ~ | | Switch Poll sidius | |
| Switch Settings \sim | | Device Info | Device Info |
| VI AN Sottings | Hostname | Switch | |
| vour setung) | Model | Switch | |
| 0 | MAC Address | 84:E5:D8:E0:50:2C | |
| Qos settings V | IP Address | 192.168.2.1 | |
| | Submask | 255.255.255.0 | |
| PoE Settings ~ | Gateway | 192.168.2.1 | |
| | DNS | 114.114.114.114 | |
| Onvif ~ | SN | 3782310170001 | |
| | Firmware Version | V100SP10231229 | |
| Eurotion Monu | Firmware Date | Fri_Dec_29_14:45:29_2023 | |
| runenu | Hardware Version | V1.00 | |
| | Running Time | 0d 00h 11min 1s | |
| | Device Contact | Default | |
| | Device Location | Default | |

As you can see, the page is divided into two parts:

- The left part is the menu bar, which displays the links of all configuration functions of the equipment, such as monitoring management and switch configuration module.
- The right part is the content area, which is divided into upper and lower parts. The upper side is the port status bar, Chinese and English display switching and "Logout" button, and the lower side is the page content presentation and configuration area.







Port Status Bar:

Move the mouse to the port to display the basic status of the port (including port connection status, rate duplex and flow control status). Click "Collapse" to hide the port status bar and display more content areas to view other configuration information.

When a loop appears on the port, the port icon displays yellow

When the port works normally, the port icon displays green

The content area sometimes presents orange text (indicating the description of the function block)

Loop Guard

The port causing the loop will be shut down. After the loop is removed, the port will be up automatically.

Enabled





WEB SMART CONFIGURATION HOMEPAGE

The homepage interface displays the basic information of the device.

| Device Info | | | |
|------------------|--------------------------|--|--|
| Hostname | Switch | | |
| Model | Switch | | |
| MAC Address | 84:E5:D8:E0:50:2C | | |
| IP Address | 192.168.2.1 | | |
| Submask | 255.255.255.0 | | |
| Gateway | 192.168.2.1 | | |
| DNS | 114.114.114 | | |
| SN | 3782310170001 | | |
| Firmware Version | V100SP10231229 | | |
| Firmware Date | Fri_Dec_29_14:45:29_2023 | | |
| Hardware Version | V1.00 | | |
| Running Time | 0d 00h 11min 1s | | |
| Device Contact | Default | | |
| Device Location | Default | | |

SYSTEM SETTINGS

DEVICE INFO

Configure the information of the device, including Device Name, Device Contact and Device Location.

| Device Info | | | | |
|-----------------|---------|--|--|--|
| Hostname | Switch | | | |
| Device Contact | Default | | | |
| Device Location | Default | | | |
| Apply | | | | |

IP SETTINGS

Configure device management IP (default static IP: 192.168.2.1)

| | IP | ettings | |
|---------------|----|---------------|--|
| DHCP Client | | Disabled 🗸 | |
| IP Address | | 192.168.2.1 | |
| Submask | | 255.255.255.0 | |
| Gateway | | 192.168.2.1 | |
| Auto Obtain D | NS | Disabled ~ | |
| DNS | | 223.6.6.6 | |

When "Auto Obtain IP" is displayed as follows:

| IP Settings | | | | |
|-----------------|---------------|--|--|--|
| DHCP Client | Enabled 🗸 | | | |
| IP Address | 192.168.2.1 | | | |
| Submask | 255.255.255.0 | | | |
| Gateway | 192.168.2.1 | | | |
| Auto Obtain DNS | Enabled 🗸 | | | |
| DNS | 223.6.6.6 | | | |
| | Abbly | | | |



When configuring IP, the device will be disconnected briefly. If automatic IP acquisition is enabled, you need to obtain the configuration IP from the DHCP server on your network.





WEB SETTINGS

Configure web page timeout, default is 5 minutes.

| WEB Settings | | | | |
|--------------|---|-----------------------------|--|--|
| WEB Timeout | 5 | Web timeout (1-60) minutes. | | |
| Apply | | | | |



The timeout can be configured for 1-60

TELNET SETTINGS

Configure Telnet timeout, default is 10 minutes.

| Telnet Settings | | | | |
|-----------------|-----------------------------------|--|--|--|
| Telnet Status | Enabled 🗸 | | | |
| Telnet Timeout | 10 Telnet timeout (1-60) minutes. | | | |
| Apply | | | | |



The timeout can be configured for 1-60 minutes.

USER MANAGEMENT

Configure the account and password for web page login (The password must contain 6-16 characters and contain only letters, numbers and the following special characters: <=>[]!@#\$*().)

| User Management | | | | | | |
|------------------|------------------|---|--|--|--|--|
| Account | Account | | | | | |
| Password | Password | The password must contain only letters, numbers and the following special characters: <=>[] $@#$ \$*(). | | | | |
| Confirm Password | Confirm Password | | | | | |
| | | Apply | | | | |

UPGRADE

System upgrade can be divided into Local upgrade and Online upgrade:

1 Local upgrade

Click "**Select File**" and select the software package you want to upgrade in the popup file selection box (the software upgrade package is a file in xxx.bin format).



2 Online upgrade

This option is currently not available.

| | | Online Upgrade | | | |
|-------------------------------------|----------------|-----------------------------|--|--|--|
| Select bin file for device upgrade. | | | | | |
| Firmware name | | | | | |
| Server address | | (Domain Name or IP address) | | | |
| Now Firmware Version | V100SP10220721 | | | | |
| | Upgrade | | | | |





DEVICE MANAGEMENT

| BUTTON | DESCRIPTION |
|-------------|--|
| Reboot | Click to restart the equipment |
| Restore | Click to restore the factory configuration and restart the equipment |
| Save Config | Click to save current device configure |

| | Device Management | 2.0 |
|----------------|--|-----|
| Reboot | Reboot Reboot the switch. | |
| Restore | Restore Restore factory configuration and reboot the switch. | |
| Save Configure | Save Configure Save current device configure. | |

MONITORING

PORT STATISTICS

The Port Statistics page displays the data statistics and status of the device port, such as the port sending and receiving rate, sending and receiving packets, etc.

| No. | Port | Link Status | Rx/Tx Rate(Bps) | Rx/Tx Rate(pps) | Rx/Tx Success | Rx/Tx Failure |
|-----|--------|-------------|-----------------|-----------------|----------------|---------------|
| 1 | Port 1 | Disconnect | 0/0 | 0/0 | 0/0 | 0/0 |
| 2 | Port 2 | Disconnect | 0/0 | 0/0 | 0/0 | 0/0 |
| 3 | Port 3 | Connected | 5845/0 | 0/0 | 4848715/345385 | 0/0 |
| 4 | Port 4 | Disconnect | 0/0 | 0/0 | 0/0 | 0/0 |
| 5 | Port 5 | Disconnect | 0/0 | 0/0 | 0/0 | 0/0 |
| 6 | Port 6 | Disconnect | 0/0 | 0/0 | 0/0 | 0/0 |

CABLE DIAGNOSTICS

It is possible to perform various tests of a attached cable via the corresponding port through cable detection (such as whether the cable is short circuited, disconnected, etc.).

Click "Start All" and wait for the test results to return.

| | | Cable Diagnostics | | | | Cable Diagnostic | s |
|----------------------------|--|--|-------------|----------------------------|--|--|---|
| This page d Length:Dist | letects the cable connection and the ap ance in meter from the port to the loct | proximate location of the cable fault. ion on the cable where the fault was discovered. | | This page d Length:Dist | tects the cable connection and the app nce in meter from the port to the loctio | oximate location of the cable fault. n on the cable where the fault was discovered. | |
| | Port | Test Result | Description | 0 | Port | Test Result | Description |
| | Port 1 | | | | Port 1 | Norral | Normal(Connectly terminated pair) |
| 0 | David 2 | | | 0 | Port 2 | Norral | Nomal(Correctly terminated pair) |
| U | Poit2 | | | 0 | Port 3 | Disconected | Please check whether the network cable is connected(Open pairso link partner) |
| U | Port 3 | | | 0 | Port 4 | Disconected | Please check whether the network cable is connected(Open paluto link partner) |
| | Port 4 | | | | Port 5 | Disconected | Please check whether the network cable is connected/Open palono link partner/ |
| | Port 5 | | | | Port 6 | Discounted | Please check whether the network cable is connected/Open calcos link partner) |
| | Port 6 | | | | | | |
| | | Start Start All | | | | Start Start / | M |

LOOP GUARD (PART OF OUR SELF-HEALING NETWORK SUITE)

Configure enable loop guard

| Loop Guard | | | | | | |
|--|--|--|--|--|--|--|
| The port causing the loop will be shut down. After the loop is removed, the port will be up automatically. | | | | | | |
| Enabled Off | | | | | | |
| | | | | | | |



The port causing the loop will be shut down. After the loop is removed, the port will be up automatically. (Default is disable).





PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

IGMP SNOOPING

Configure IGMP Snooping



Unknown multicast Handel Action can configure **FLOOD** or **DROP**, Select the VLAN you want to enable and click "**Apply**" to save.



IGMP Snooping only supports DIP mode, the maximum multicast entry is 10, Unknown multicast Handel Action default is flood.

SWITCH SETTINGS

PORT SETTINGS

Port configuration can batch configure the status, speed, duplex, flow control and EEE (Energy Efficient Ethernet) properties of ports. The page is divided into two parts:

Configuration part:

Select the port to be configured, then select each attribute to be configured, and click "Apply" to distribute the configuration.

| | | Port S | etting | | |
|---------------|--------------|--------|--------|----------------|------------|
| Ports | Admin Status | Speed | Duplex | Flow Control 🕜 | EEE 🕜 |
| Please select | Enabled 👻 | Auto 👻 | Auto 👻 | Disabled ~ | Disabled 👻 |

Display part:

Displays the configuration attributes and actual effective attributes of each port of the device.

| Port List | | | | | | | | |
|-----------|---------------------------|--------------|-----------|------------|----------|----------|----------|--|
| | Speed Duplex Flow Control | | | | | | | |
| NO. | Port | Admin Status | Config | Actual | Config | Actual | EEE | |
| 1 | Port 1 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled | |
| 2 | Port 2 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled | |
| 3 | Port 3 | Enabled | Auto/Auto | 1000M/Full | Disabled | Disabled | Disabled | |
| 4 | Port 4 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled | |
| 5 | Port 5 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled | |
| 6 | Port 6 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled | |

PORT MONITORING

The input / output messages of one or more source image ports are forwarded to the destination image port to monitor the network.





- 1. Source port and destination port cannot be the same;
- 2. Another mirror group is using the destination;
- 3. Supports 4 Session IDs





PORT ISOLATION

Configure isolation port group.

| | | Port Isolation Setting |
|---|----------|------------------------|
| | Port | Isolation Port |
| | Port 1 👻 | Please select |
| | | Port Isolation Table |
| 0 | Port | Isolation Port |
| | | |

JUMBO FRAME

Configure the size of Jumbo Frames that can be forwarded.





1. Jumbo Frames can be configured with 1522, 1536, 1552, 9216 and 10000;

2. The default value of Jumbo Frames is 1522.

GREEN ENABLE



Activate the additional green ethernet options for cable length detection and power management.

STATIC MAC

The static MAC configuration is divided into two parts.

Static MAC add:

Enter the legitimate MAC address, VLAN ID, and select the configured port number. Click "Add" to add static MAC.



Static MAC deletion and display:

After adding a legal static MAC, the corresponding data will be displayed; Check the static MAC and click"**Delete**". After the configuration is successful, the MAC address, VLAN and corresponding port will be unbound.





Static MAC addresses maximum can be configured 16.







Configure filtered MAC address

| | | Fi | ilter MAC Address | |
|-----------------|------------------------------|-------------------|-------------------|---------|
| Up to 16 Filter | MAC addresses can be configu | ared. | | |
| | | MAC Address | | VLAN ID |
| | | 00:00:00:00:00:00 | | VLAN1 V |
| | | | Add | |
| | No. | MAC Ad | Idress | VLAN ID |
| | | | | |



Filter MAC addresses maximum can be configured 16.

SEARCH MAC

Search the MAC table learned by the device (support fuzzy search)



The inquiry waiting process will interrupt the communication with the equipment

MAC LIST

Displays the list of MAC learned by the device

| No. | MAC Address | VLAN ID | Type | Port |
|-----|-------------------|---------|---------|--------|
| 1 | 84:E5:D8:00:B8:F0 | VLAN1 | Dynamic | Port 2 |
| 2 | 20:78:D2:95:AF:6A | VLAN1 | Dynamic | Port 1 |

Click "Clear Dynamic MAC" and the device will get the learning MAC list again.

The display waiting process will interrupt communication with the device

DHCP SNOOPING

Configure DHCP Snooping function, which is disabled by default.

| 100 | DHCP Snooping Settings | |
|---------------|------------------------|--|
| DHCP Snooping | | |

When DHCP Snooping is enabled, you can choose to trust ports or not. As shown in the following figure, the device sets the selected ports as trusted ports, and if it is not selected, all ports are untrusted ports; Click "**Apply**" to set the selected port as a trusted port and complete the configuration of DHCP snooping.

| DHCP SIIO | oping wat |
|-----------------|--|
| | Status |
| Trusted Port | Celer Allowaler 2 Port 2 Port : Port |
| VLAN | Select Al/Unrollect |



1. Enable DHCP snooping to filter DHCP messages. For the request message from DHCP client, only forward it to the trust port; for the response message from DHCP server, only forward the response message from the trust port.

2. Generally, the DHCP server port (upper connection port) is set as the trust port.





VLAN SETTINGS

The homepage interface displays the basic information of the device.

VLAN MEMBER

Configuration part:

Enter a valid VLAN ID and click "Apply" to configure a new VLAN member;

| | VLAN Member | | |
|---------|-------------|-----------|--|
| VLAN ID | (1-4094) | | |
| | Apply | 1999 - C. | |

Display part:

Displays the VLAN members newly added by the device, Select VLAN members in the VLAN member list and click "**Delete**" to delete VLAN members in batch

| No. | VLAN ID |
|-----|---------|
| 1 | 1 |
| 2 | 10 |
| 3 | 20 |
| 4 | 30 |
| | Delete |



1. Configure up to 16 VLAN members;

2. When VLAN ID is bound by port, it cannot be deleted.

VLAN SETTINGS

Port VLAN configuration is divided into two parts:

Part I: Port VLAN configuration, select port, VLAN type (access and trunk, allow VLAN can be configured under trunk), allow VLAN and native VLAN, and click "**Apply**" to configure and save port VLAN (Permit VLAN and Native VLAN are selected from the VLAN members configured above);

| | 1. 10 ¹⁰ | VLAN Settings | | |
|---------------|---------------------|---------------|-------------|---------------|
| Port | VLAN Type | Access VLAN | Native VLAN | Permit VLAN |
| Please select | Access 🐱 | VLAN 1 🗸 | VLAN 1 🛩 | Please select |
| | | Apply | | |

Part II: Port VLAN list, which displays the VLAN configuration of the device port.



The message under Native VLAN does not have VLAN tag.

| Port | VLAN Type | Access VLAN | Native VLAN | Permit VLAN |
|--------|-----------|-------------|-------------|-------------|
| Port 1 | Access | 1 | | |
| Port 2 | Access | 1 | | |
| Port 3 | Access | 1 | | |
| Port 4 | Access | 1 | | |
| Port 5 | Access | 1 | | |
| Port 6 | Access | 1 | | |





PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

QOS SETTINGS

Including port rate limit and storm control functions.

PORT RATE

Configure the port ingress and egress rate, which is divided into two parts:

Configuration part:

Select one or more ports, select the configuration type and whether to enable the port speed limit (enter the value of the port speed limit when it is enabled), and click "**Apply**" to configure the port rate.

| Port Rate | | | | | | |
|---------------|---------------------------------------|------------|--------------------|--|--|--|
| Port | Port Limit Type Status Rate(Mbit/sec) | | | | | |
| Please select | Ingress 🛩 | Disabled 🐱 | No Limit (1-1000M) | | | |
| | | Apply | | | | |

Display part:

Displays the ingress rate and egress rate of the device port configuration.

| Entry | Dort | Ingress | | Egress | |
|-------|-------|----------|----------------|----------|----------------|
| Entry | POIL | Status | Rate(Mbit/sec) | Status | Rate(Mbit/sec) |
| 1 | Port1 | Disabled | 1000 | Disabled | 1000 |
| 2 | Port2 | Disabled | 1000 | Disabled | 1000 |
| 3 | Port3 | Disabled | 1000 | Disabled | 1000 |
| 4 | Port4 | Disabled | 1000 | Disabled | 1000 |
| 5 | Port5 | Disabled | 1000 | Disabled | 1000 |
| 6 | Port6 | Disabled | 1000 | Disabled | 1000 |



Rate limit range: 1-1000M.

STORM CONTROL

Including port storm control configuration and display:

Configuration part:

Select the configured storm control type, one or more ports and whether to enable storm control (when enabled, enter the rate of storm control configuration), and click "**Apply**" to configure storm control.



Display part:

Display the storm control type and corresponding rate configured by the device port (display the corresponding control rate when it is turned on).

| No. | Port | Broadcast(Mbit/sec) | Unknown Multicast(Mbit/sec) | Unknown Unicast(Mbit/sec) |
|-----|--------|---------------------|-----------------------------|---------------------------|
| 1 | Port 1 | Disabled | Disabled | Disabled |
| 2 | Port 2 | Disabled | Disabled | Disabled |
| 3 | Port 3 | Disabled | Disabled | Disabled |
| 4 | Port 4 | Disabled | Disabled | Disabled |
| 5 | Port 5 | Disabled | Disabled | Disabled |
| 6 | Port 6 | Disabled | Disabled | Disabled |



Rate limit range: 1-1000M.





QOS (QUALITY OF SERVICE) PROPERTY

Including QoS Property configuration and display:

Configuration part:

Select the configured Enable State, Queue Scheduling Mode, Priority Type and Weight, and click "**Apply**" configure QoS Property.



Display part:

Display the Enable State, Queue Scheduling Mode, Weighting of COS (Class of Service) and DSCP (Differentiated Services Code Point)





1. The QoS function is disabled by default;

2. The Queue Scheduling mode supports SP (Strict Priority) and WRR (Weighted Round Robin).

3. The priority type supports COS and DSCP;

4. Priority types with higher weights have higher priorities. When

the weights are the same, COS have higher priority.

COS PRIORITY MAPPING

Including configuration and display:

Configuration part:

Select the configured COS Priority and Inner Priority, and click "Apply" configure.

| | COS Priority Mapping |
|---------------|----------------------|
| COS Priority | Inner Priority |
| Please select | 0 • |
| | Apply |

Display part:

Display the COS Priority and Inner Priority.





The default COS priority corresponds to the internal priority 0-7 in turn.

DSCP PRIORITY MAPPING

Including configuration and display:

Configuration part:

Select the configured DSCP Priority Mapping and Inner Priority, and click "Apply" configure.







Display part:

Display the DSCP Priority Mapping and Inner Priority.

| DSCP Priority | Inner Priority |
|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| 0 | 0 | 16 | 2 | 32 | 4 | 48 | 6 |
| 1 | 0 | 17 | 2 | 33 | 4 | 49 | 6 |
| 2 | 0 | 18 | 2 | 34 | 4 | 50 | 6 |
| 3 | 0 | 19 | 2 | 35 | 4 | 51 | 6 |
| 4 | 0 | 20 | 2 | 36 | 4 | 52 | 6 |
| 5 | 0 | 21 | 2 | 37 | 4 | 53 | 6 |
| 6 | 0 | 22 | 2 | 38 | 4 | 54 | 6 |
| 7 | 0 | 23 | 2 | 39 | 4 | 55 | 6 |
| 8 | 1 | 24 | 3 | 40 | 5 | 56 | 7 |
| 9 | 1 | 25 | 3 | 41 | 5 | 57 | 7 |
| 10 | 1 | 26 | 3 | 42 | 5 | 58 | 7 |
| 11 | 1 | 27 | 3 | 43 | 5 | 59 | 7 |
| 12 | 1 | 28 | 3 | 44 | 5 | 60 | 7 |
| 13 | 1 | 29 | 3 | 45 | 5 | 61 | 7 |
| 14 | 1 | 30 | 3 | 46 | 5 | 62 | 7 |
| 15 | 1 | 31 | 3 | 47 | 5 | 63 | 7 |



Default DSCP priority 0-7 corresponds to internal priority 0, 8-15 corresponds to internal priority 1, and so on.

INNER PRIORITY MAPPING

Including configuration and display:

Configuration part:

Select the configured Inner Priority and Queue ID, and click "Apply".



Display part:

Display the Inner Priority and Queue ID.

| Inner Priority | Queue ID |
|----------------|----------|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |



Default internal priority 0-7 corresponds to queue ID 0-7.

QUEUE SCHEDULING

Including configuration and display:

Configuration part:

Select the configured Queue ID and Weight, and click "Apply".



Display part:

Display the Queue ID and Weight

| Queue ID | Queue Scheduling Mode | Weight |
|----------|-----------------------|--------|
| 0 | WRR | 1 |
| 1 | WRR | 2 |
| 2 | WRR | 3 |
| 3 | WRR | 4 |
| 4 | WRR | 5 |
| 5 | WRR | 6 |
| 6 | WRR | 7 |
| 7 | WRR | 8 |



PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough



When the queue scheduling mode is SP, the weight cannot be set. The default weight of the eight queues is 1.





When the queue scheduling mode is WRR, 0-7 of the queue ID corresponds to 1-8 of the weight by default.

POE SETTINGS

POE GLOBAL INFO

Displays the global information of the device PoE function

| PoE Global Info | |
|-----------------------|-----------------|
| PoE Hardware Version | V1.0 |
| PoE Work Status | Normal |
| PoE Support Type | 802.3af/802.3at |
| PoE Consumption Power | 0W |
| PoE Port Number | 4 |
| PoE Total Power | 60W |
| PoE Voltage | 53 V |
| Software Version | V1.0.3 |

POE BASIC SETTINGS

Including PoE configuration and display:

Configuration part:

Select the PoE power supply status, priority and limited power of the configured port, and click "**Apply**" to configure PoE.

| | | 199 ⁹ | PoE Basic Settings | | | |
|---------------|---|-------------------|--------------------|-----|---------|--|
| Port | P | oE Control Status | Priority | PoE | Limit | |
| Please select | | Enabled 👻 | Low 👻 | 32 | (1-32W) | |
| | | | Apply | | | |

Display part:

Display the power of port PoE and the current power supply status;

| Entry | Port | PoE Control Status | Power Status | PoE Limit(1-32W) | Power | Priority | Class |
|-------|-------|--------------------|--------------|------------------|-------|----------|-------|
| 1 | Port1 | Enabled | Off | 32W | 0W | Low | N/A |
| 2 | Port2 | Enabled | Off | 32W | 0W | Low | N/A |
| 3 | Port3 | Enabled | Off | 32W | 0W | Low | N/A |
| 4 | Port4 | Enabled | Oll | 32W | ow | Low | N/A |



Disable port PoE. Port PoE will not be powered.





PoE-Powered 6-Port Lite Smart Managed PoE+ Switch with 4 GbE Ports / 2 GbE Uplinks and PoE Passthrough

PDM (POWERED DEVICE MONITOR) A POE WATCHDOG FEATURE

Includes PDM configuration and display:

Configuration part:

Configure the detection time of PDM (60-86400s. When no communication is detected on the port, PoE will be restarted automatically). Click "**Apply**" to configure PDM.

| | | | PD Alive | |
|---------------|---|------|--------------------------|--|
| Monitor Tin | e | 3600 | (60~86400,default 3600s) | |
| | | | Apply | |
| Port | | | Monitor Status | |
| Please select | | | Disabled 🗸 | |
| | | | Apply | |

Display part:

Displays the number of restarts of device PDM.

| Entry | Port | Monitor Status | Reset Count |
|-------|-------|----------------|-------------|
| 1 | Port1 | Disabled | 0 |
| 2 | Port2 | Disabled | 0 |
| 3 | Port3 | Disabled | 0 |
| 4 | Port4 | Disabled | 0 |

ONVIF (OPEN NETWORK VIDEO INTERFACE FORUM)

Support ONVIF protocol function to discover compatible devices

| | Onvif Detect | | |
|-------------|----------------|------|-------|
| MAC Address | IP Address | Port | Model |
| | Detect Refresh | | |

Click "**Detect**" to find the device.

| Onvif Detect | | | | | |
|-------------------|---------------|------|---------------------|--|--|
| MAC Address | IP Address | Port | Model | | |
| 10:F0:13:F1:7C:0C | 192.168.19.66 | 11 | Switch | | |
| 48:EA:63:60:69:83 | 192.168.19.8 | 11 | NVR304-32E-B-DT | | |
| 48:EA:63:28:A0:63 | 192,168,19,52 | 11 | IPC331S-IR3-PF40-DT | | |





APPENDIX: TECHNICAL SPECIFICATIONS

| | | HARDWARE SPECIFICATIONS | | | |
|------------------------|------------|--|--|--|--|
| Standards and Pr | otocols | IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1q, IEEE 802.1p, IEEE802.3af, IEEE802.3at | | | |
| Network Media | | 10Base-T: UTP category 3, 4, 5 cable (maximum 100 m) 100Base-Tx: UTP category 5, 5e cable (maximum 100 m) 1000Base-T: UTP category 5e, 6 cable (maximum 100 m) | | | |
| Transfer Method | | Store-and-Forward | | | |
| Switching Capaci | ity | 12 Gbps | | | |
| Packet Forwardin | ıg | 8.93 Mpps | | | |
| Packet Buffer | | 4.1 Mbit | | | |
| MAC Address Tab | le | 8K, Auto-learning, Auto-update | | | |
| Jumbo Frame | | 9K Bytes | | | |
| Number of Ports | | 6 x 10/100/1000 Mbps ports PoE | | | |
| PoE Ports(RJ45) | | 4 x PoE ports compliant with 802.3at/af | | | |
| Power Pin Assign | ment | 1/2 (+), 3/6 (-) | | | |
| PoE Budget | | 60 W | | | |
| Indicators | Per Port | 10/100/1000 Mbps Link/Act: Green PoE: Orange | | | |
| | Per Device | Power: Orange | | | |
| Power Supply | | AC 100 – 240 V / 50 – 60 Hz internal power | | | |
| Power Consumption | | Maximum: 65 W (220 V / 50 Hz) | | | |
| Dimensions (W x D x H) | | 168 x 94 x 32mm (6.61 x 3.7 x 1.26 in.) | | | |
| Environment | | Operating Temperature: 0 – 40°C (32 – 113°F) Storage Temperature: -40 – 70°C (-40 – 158°F) Operating Humidity: 10 – 90% non-condensing Storage humidity: 5 – 90% non-condensing | | | |

| | SOFTWARE SF | PECIFICATIONS | |
|--|--|---|---|
| Basic | System Settings | Monitoring | Switch Settings |
| Login authentication and logout Bilingual UI: English Chinese Port Indication: 1000M green 1000M/10M orange-yellow | Device Info: Hostname Device Contact & Location IP Settings Static, DHCP Client, DNS Web Settings: Timeout Telnet Settings: Enable/disable Telnet, Timeout User Management Local Upgrade Device Management Reboot, Save Configure, Restore | Port Statistics Cable Diagnostics Loop Guard: RLPP IGMP Snooping: Flood/Drop, DIP Mode | Port Settings: Status, Speed/Duplex/Flow Control Port Mirroring |
| VLAN Settings | QOS Settings | PoE Settings | Cloud Settings |
| VLAN Member VLAN Settings: Access Trunk | Port Rate Storm Control QoS Priority Mapping: CoS and DSCP priority mapping QoS Queue Scheduling: 8 queue, SP and WRR Queue Scheduling | PoE Basic Settings: Enable/disable PoE port Force Power PoE Port Limit PD Alive | Cloud Settings: MQTT |













WASTE ELECTRICAL & ELECTRONIC EQUIPMENT DISPOSAL OF ELECTRIC AND ELECTRONIC EQUIPMENT

(Applicable In The European Union And Other European Countries With Separate Collection Systems)
 ENGLISH: This symbol on the product or its packaging means that this product must not be treated as unsorted household waste. In accordance with EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE),
 FRANÇAIS: Ce symbole sur le produit ou son emballage signifie que produit ne doit pas être traité comme un déchet ménager. Conformé à la Directive 2012/19/EU sur les déchets d'équipements électriques électroniques (DEEE), ce produit électrique ne doit en aucun cas être

this electrical product must be disposed of in accordance with the user's local regulations for electrical or electronic waste. Please dispose of this product by returning it to your local point of sale or recycling pickup point in your municipality. DEUTSCH: Dieses auf dem Produkt oder der Verpackung angebrachte Symbol zeigt an, dass dieses Produkt nicht mit dem Hausmüll entsorgtwerden darf. In Übereinstimmung mit der Richtlinie 2012/19/ EU des Europäischen Parlaments und des Rates über Elektro- und Elektronik-Altgeräte (WEEE) darf dieses Elektrogerät nicht im normalen Hausmüll oder dem Gelben Sack entsorgt werden. Wenn Sie dieses Produkt entsorgen möchten, bringen Sie es bitte zur Verkaufsstelle zurück oder zum Recycling-Sammelpunkt Ihrer Gemeinde. ESPAÑOL: Este símbolo en el producto o su embalaje indica que el producto no debe tratarse como residuo doméstico. De conformidad con la Directiva 2012/19/EU de la UE sobre residuos de aparatos eléctricos y electrónicos (RAEE), este producto eléctrico no puede desecharse se con el resto de residuos no clasificados. Deshágase de este producto devolviéndolo a su punto de venta o a un punto de recolección municipal para su reciclaje.

FRANÇAIS: Ce symbole sur le produit ou son emballage signifie que ce produit ne doit pas être traité comme un déchet ménager. Conformément à la Directive 2012/19/EU sur les déchets d'équipements électriques et électroniques (DEEE), ce produit électrique ne doit en aucun cas être mis au rebut sous forme de déchet municipal non trié. Veuillez vous débarrasser de ce produit en le renvoyant à son point de vente ou au point de ramassage local dans votre municipalité, à des fins de recyclage. ITALIANO: Questo simbolo sui prodotto o sulla relativa confezione indica che il prodotto non va trattato come un rifiuto domestico. In ottemperanza alla Direttiva UE 2012/19/EU sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE), guesta prodotto elettrico non deve essere smaltito come rifiuto municipale misto. Si prega di smaltire il prodotto riportandolo al punto vendita o al punto di raccolta municipale locale per un opportuno riciclaggio. POLSKI: Jeśli na produkcie lub jego opakowaniu umieszczono ten symbol, wówczas w czasie utylizacji nie wolno wyrzucać tego produktu wraz z odpadami komunalnymi. Zgodnie z Dyrektywa Nr 2012/19/EU w sprawie zużytego sprzętu elektrycznego i elektronicznego (WEEE), niniejszego produktu elektrycznego nie wolno usuwać jako nie posortowanego odpadu komunalnego. Prosimy o usuniecie niniejszego produktu poprzez jego zwrot do punktu zakupu lub oddanie do miejscowego komunalnego punktu zbiórki odpadów przeznaczonych do recyklingu.

WARRANTY INFORMATION • GARANTIEINFORMATIONEN • GARANTÍA • GARANTIE • GWARANCJI • GARANZIA intellinet-network.com

EN MÉXICO: Póliza de Garantía Intellinet Network Solutions — Datos del importador y responsable ante el consumidor IC Intracom México, S.A.P.I. de C.V. • Av. Interceptor Poniente # 73, Col. Parque Industrial La Joya, Cuautitlán Izcalli, Estado de México, C.P. 54730, México. • Tel. (55)1500-4500 La presente garantía cubre los siguientes productos contra cualquier defecto de fabricación en sus materiales y mano de obra.

- A. Garantizamos los productos de limpieza, aire comprimido y consumibles, por 60 dias a partir de la fecha de entrega, o por el tiempo en que se agote totalmente su contenido por su propia función de uso, lo que suceda primero.
- B. Garantizamos los productos con partes móviles por 3 años.
- C. Garantizamos los demás productos por 5 años (productos sin partes móviles), bajo las siguientes condiciones:
 - 1. Todos los productos a que se refiere esta garantía, ampara su cambio físico, sin ningún cargo para el consumidor.
 - 2. El comercializador no tiene talleres de servicio, debido a que los productos que se garantizan no cuentan con reparaciones, ni refacciones, ya que su garantía es de cambio físico.
 - 3. La garantía cubre exclusivamente aquellas partes, equipos o sub-ensambles que hayan sido instaladas de fábrica y no incluye en ningún caso el equipo adicional o cualesquiera que hayan sido adicionados al mismo por el usuario o distribuidor.

Para hacer efectiva esta garantía bastará con presentar el producto al distribuidor en el domicilio donde fue adquirido o en el domicilio de IC Intracom México, S.A.P.I. de C.V., junto con los accesorios contenidos en su empaque, acompañado de su póliza debidamente llenada y sellada por la casa vendedora (indispensable el sello y fecha de compra) donde lo adquirió, o bien, la factura o ticket de compra original donde se mencione claramente el modelo, número de serie (cuando aplique) y fecha de adquisición. Esta garantía no es válida en los siguientes casos: Si el producto se hubiese utilizado en condiciones distintas a las normales; si el producto no ha sido operado conforme a los instructivos de uso; o si el producto ha sido alterado o tratado de ser reparado por el consumidor o terceras personas.





REGULATORY STATEMENTS

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: reorient or relocate the receiving antenna; increase the separation between the equipment and the receiver; connect the equipment to an outlet on a circuit different from the receiver; or consult the dealer or an experienced radio/TV technician for help.

CE

ENGLISH: This device complies with the requirements of CE 2014/30/EU and/or 2014/35/EU. The Declaration of Conformity for is available at: DEUTSCH: Dieses Gerät enspricht der CE 2014/30/EU und / oder 2014/35/EU. Die Konformitätserklärung für dieses Produkt finden Sie unter: ESPAÑOL: Este dispositivo cumple con los requerimientos de CE 2014/30/EU y / o 2014/35/EU. La declaración de conformidad esta disponible en: FRANÇAIS: Cet appareil satisfait aux exigences de CE 2014/30/EU et / ou 2014/35/EU. La Déclaration de Conformité est disponible à: POLSKI: Urządzenie spełnia wymagania CE 2014/30/EU I / lub 2014/35/EU. Deklaracja zgodności dostępna jest na stronie internetowej producenta: ITALIANO: Questo dispositivo è conforme alla CE 2014/30/EU e / o 2014/35/EU. La dichiarazione di conformità è disponibile al:

support.intellinet-network.com/barcode/562034



North America IC Intracom America 550 Commerce Blvd. Oldsmar, FL 34677 USA

Asia & Africa IC Intracom Asia 4-F, No. 77, Sec. 1, Xintai 5th Rd. Xizhi Dist., New Taipei City 221, Taiwan **Europe** IC Intracom Europe Löhbacher Str. 7, D-58553 Halver, Germany

All trademarks and trade names are the property of their respective owners. Alle Marken und Markennamen sind Eigentum Ihrer jeweiligen Inhaber. Todas las marcas y nombres comerciales son propiedad de sus respectivos dueños. Toutes les marques et noms commerciaux sont la propriété de leurs propriétaires respectifs. Wszystkie znaki towarowe i nazwy handlowe należą do ich właścicieli. Tutti i marchi registrati e le dominazioni commerciali sono di proprietà dei loro rispettivi proprietari.





intellinet-network.com

All trademarks and trade names are the property of their respective owners.

© IC Intracom. All rights reserved. Intellinet Network Solutions is a trademark of IC Intracom, registered in the U.S. and other countries.