RADWIN IDU switch series

Powerful L2/L3 PoE switches for all your networking needs

Installation ready for indoor telecom racks & outdoor/street cabinets

The RADWIN IDU switch series consists of 2 products, the IDU-S and the IDU-SI. RADWIN IDUs support Layer 2 and Layer 3 capabilities and high-power PoE budget for operating RADWIN PtP and PtMP radios and other devices like cameras, Wi-Fi access points, IoT gateways, and more. Managed by RADWIN's WINManage network management system, the IDUs provide a multi-layer, end-to-end managed solution for RADWIN's global partner and integrator networks.
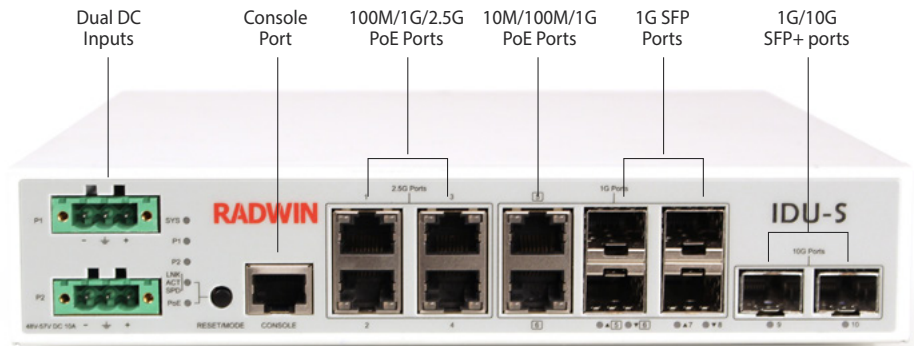
RADWIN IDU-S & IDU-SI serve as a single indoor unit that streamlines your network by aggregating data and powering multiple RADWIN base stations or CPEs (backhaul) on the tower, eliminating the need for extra 3rd party equipment.

The IDU's support 1GbE and 2.5GbE user ports with PoE connecting up to 4 RADWIN base stations (including the JET DUO series) and additional radios or devices. In addition, RADWIN IDU's integrate seamlessly with customer Ethernet/IP fiber optics backbone, at data rates up to 10Gbps and can be monitored via a friendly WEB GUI or with RADWIN WINManage NMS.
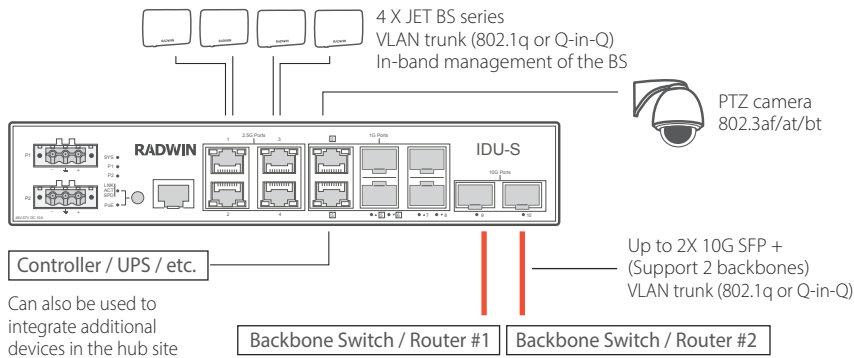
IDU-S – Layer 2 indoor switch

The RADWIN IDU-S is a managed Ethernet switch with full Layer 2 switching and basic Layer 3 static routing capabilities, and high-power budget. It boosts operational efficiency and ensures ease of use with RADWIN's PtP and PtMP radios.

RADWIN IDU-S supports up to 540W PoE output (with up to 90W per PoE for high-capacity radio units) and handles up to 14Gbps full duplex traffic for connected radios.
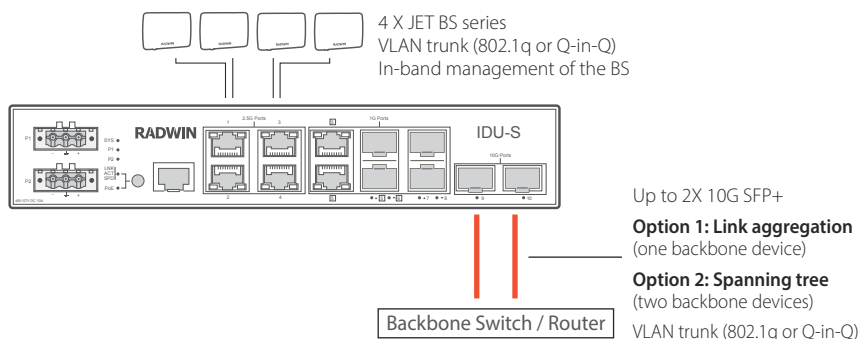

Dual DC Inputs | Console Port | 100M/1G/2.5G PoE Ports | 10M/100M/1G PoE Ports | 1G SFP Ports | 1G/10G SFP+ ports

Typical IDU-S use cases

Use case 1 - Base station connectivity in hub sites

4 X JET BS series
VLAN trunk (802.1q or Q-in-Q)
In-band management of the BS

PTZ camera
802.3af/at/bt

Controller / UPS / etc.

Can also be used to integrate additional devices in the hub site

Up to 2X 10G SFP +
(Support 2 backbones)
VLAN trunk (802.1q or Q-in-Q)

Backbone Switch / Router #1 | Backbone Switch / Router #2

Use case 2 - Dual fiber backhaul

4 X JET BS series
VLAN trunk (802.1q or Q-in-Q)
In-band management of the BS

Up to 2X 10G SFP+

Option 1: Link aggregation
(one backbone device)

Option 2: Spanning tree
(two backbone devices)

Backbone Switch / Router
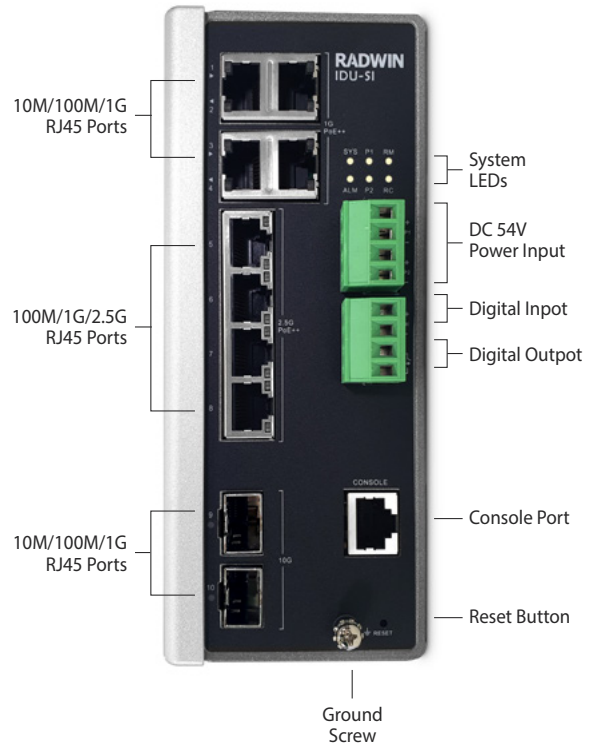
VLAN trunk (802.1q or Q-in-Q)

IDU-S product highlights

- » 30/60/90W per PoE port
- » 540W total PoE budget
- » 4 x PoE ports up to 2.5G
- » 2 x combo ports up to 1G (PoE or SFP)
- » 2 x 1G SFP ports
- » Dual DC power input (redundancy)
- » HTTP/S web GUI and Telnet/SSH CLI for remote management
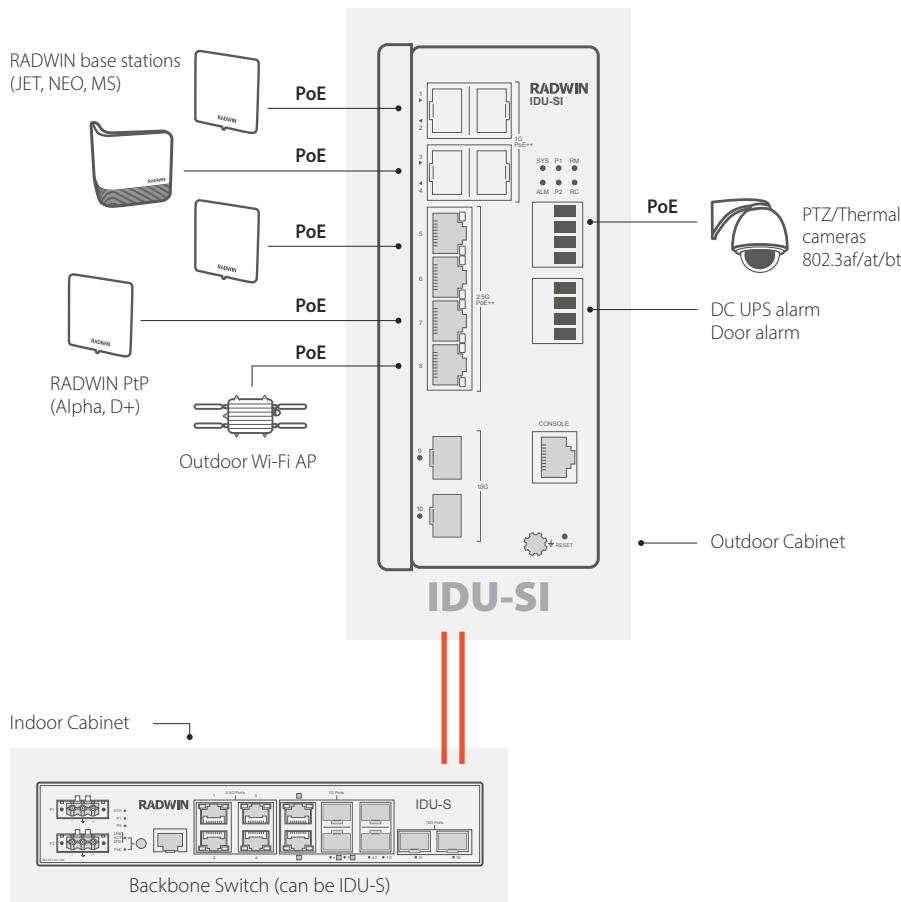- » Console port for local management

IDU-SI – Layer 2 and Layer 3 industrial switch

RADWIN IDU-SI is a managed rugged and fanless Ethernet switch with full Layer 2 and comprehensive Layer 3 switching capabilities and high-power PoE budget. It is designed to support extended temperature ranges and is very compact. With its DIN rail mount adapter, it can be easily installed in outdoor cabinets, ensuring ease of use when paired with RADWIN's PtP and PtMP radios.

RADWIN IDU-SI supports up to 360Watt PoE output. Up to 90W PoE in four 2.5GbE ports and four 1GbE ports up to a total of 68 Gbps switching capacity. The IDU-SI aggregates data into two high-speed 1G/10G SFP+ ports. The IDU-SI has a terminal block connector for dry contacts (I/O) and a RJ45 to DB9 console serial port.

- 10M/100M/1G RJ45 Ports
- System LEDs
- DC 54V Power Input
- Digital Inpot
- Digital Outpot
- 100M/1G/2.5G RJ45 Ports
- 10M/100M/1G RJ45 Ports
- Console Port
- Reset Button
- Ground Screw

Typical use case

- RADWIN base stations (JET, NEO, MS)
- PoE
- PoE
- PoE
- PoE
- PoE
- RADWIN PtP (Alpha, D+)
- Outdoor Wi-Fi AP
- PoE
- PTZ/Thermal cameras 802.3af/at/bt
- DC UPS alarm Door alarm
- Outdoor Cabinet
- Indoor Cabinet
- Backbone Switch (can be IDU-S)

IDU-SI product highlights

- » Extended temperatures: -40°C to +70°C
- » 360W total PoE budget
- » 4 x PoE (30/60/90W) ports up to 2.5G
- » 4 x PoE (30/60/90W) ports up to 1G
- » 2 x 1G/10G SFP+ ports
- » Dry contact – Digital Input/Output Relay
- » Dual DC power input (redundancy)
- » HTTP/S web GUI and Telnet/SSH CLI for remote management
- » Console port for local management

Product Specifications

Product Information	IDU-S	IDU-SI
Product size	22 x 4.5 x 24 cm (w x h x d)	7.3 x 16.8 x 13 cm (w x h x d)
Weight	2.5 kg	1.6 kg
Operating temperatures:	0 to 45 C / 32 to 113 F	-40 to 75 C / -40 to 167 F (fanless)
Installation:	indoor, rack mount	DIN rail (indoor and outdoor cabinets)
Optional accessories:	AC/DC PS, SFP/SFP+ transceivers	AC/DC PS, SFP/SFP+ transceivers
Networking Features	**IDU-S**	**IDU-SI**
Layer 3:	IPv4/v6 Static Routing	IPv4/v6 Static Routing, RIPv1/v2 and OSPFv2/v3
Ring management:	EPS (G.8031) and ERPS (G.8032)	MRP, Rapid Ring, EPS (G.8031) and ERPS (G.8032)
VLAN:	Up to 4K VLAN's; 802.1q and 802.1ad Q-in-Q tagging	Up to 4K VLAN's; 802.1q and 802.1ad Q-in-Q tagging
Link Aggregation:	802.3ad and LACP	802.3ad and LACP
Spanning Tree:	802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)	802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
QoS:	L3-based DiffServ or L2-based (802.1p) & scheduling-based WRR (Strict & Hybrid)	L3-based DiffServ or L2-based (802.1p) & Scheduling-based WRR (Strict & Hybrid), Classification and Remapping
Security:	RADIUS, HTTPS & SSL, ACL & 802.1x	RADIUS, HTTPS & SSL, ACL & 802.1x
Management:	SNMPv1/2c/3 & NTP, DHCP, LLDP, FTP/FTPS, CLI/SSH and WEB UI	SNMPv1/2c/3 & NTP, DHCP, LLDP, FTP/FTPS, CLI/SSH, TACACS+ and WEB UI
Hardware	**IDU-S**	**IDU-SI**
PoE ports	4 x 2.5G 90W PoE 2 x 1G 90W PoE	4 x 2.5G 90W PoE 4 x 1G 90W PoE Advanced PoE management features Enhanced auto-negotiation features
PoE budget	540W	360W
Power Input	48~57 VDC dual input <30W power consumption w/o PoE	44~57 VDC dual input <30W power consumption w/o PoE
SFP ports	2 x 1G/10G SFP+ ports 4 x 1G SFP ports	2 x 1G/10G SFP+ ports
Software	**IDU-S**	**IDU-SI**
Ethernet auto-negotiation settings	Basic	Enhanced auto-negotiation settings
Power input monitoring	None	Notification in case of power source failure
PTP	IEEE 1588v2 Precision Time Protocol	
Certifications	**IDU-S**	**IDU-SI**
	CE, FCC Part 15 Class A, UL	CE, FCC Part 15 Class A, UL EN 50121 Railway IEC 60068 Shock and Vibration

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