

I2050M Series

Infinique Networks Layer2 Access Switch

Smart Web Managed Gigabit Switch for SMB Applications



Overview

Infinique's 2050M Series Switches are a Layer-2 high performance smart web managed network switches that are stable, reliable and designed for ease of use. These Layer-2 switches offer excellent high speed performance through line-rate forwarding on all ports, and have advanced redundancy and reliability features implemented through the industry standard protocols like the Ethernet Ring Protection Switching Protocol.

The 2050M series switches offer a comprehensive set of options for management of switches through Web, Cloud and MQTT protocols. Using a desktop or mobile devices like tablets or smart phones, network administrators can effectively manage, monitor and maintain the switches for optimal network performance.

These Layer-2 managed switches meet the very comprehensive demands of Enterprise and Small and Medium Business customer requirements for IT networks of branch offices, hotels, hospitals, schools, medical clinics, warehouses, restaurants and retail stores.

Product Highlights

- High performance Gigabit Ports for Fast Connections
- Supports Standard Spanning Tree Protocols ensuring seamless connectivity and high availability
- Universal 10/100/1000 Mbps ports for legacy to latest Gigabit devices
- Zero Touch Provisioning for easy and quick deployment
- Supports Web, Cloud and MQTT management
- Plug and Play PoE+ connectivity with Intelligent PoE power allocation
- Robust Aluminum metal alloy enclosure with Fan or Fan-less design for excellent heat dissipation
- Supports Industry Standards such as IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3az, IEEE 802.3ah and more.

I2050M Series

Infinique Networks Layer2 Smart Web Managed Access Switch

Series Snapshot

Model/Max. Ports		20	20	28	28
Port Type	RJ45	16	16	24	24
	SFP	4	4	4	4
PoE+			250W		370W
FAN		No	Yes	No	Yes
Switching Capacity (Gbps)		40	40	56	56

Refer Ordering Section for Part Numbers

Salient Features

High Availability

The I2050M series switches offer excellent feature of redundancy and reliability and cater to very diverse networking requirements. In addition to supporting traditional spanning tree protocols such as STP, RSTP, and MSTP, the switches also comply with the ITU-T G.8032 international standard, the Ethernet Ring Protection Switching (ERPS) protocol which enables rapid failover within Ethernet ring network topologies, ensuring seamless connectivity and minimal downtime.

Intelligent Power over Ethernet (PoE)

The I2050M series switches have models with and without PoE support. The PoE supported models provide power over Ethernet which allows a Powered Device (PD) to be powered through the same standard Ethernet cable that transmits data. The PoE power provided by each port is automatically switched to PoE or PoE+ based on the connected Powered Device.

Non-Blocking High Speed Forwarding

The switches are designed for non-blocking high-speed data forwarding across all the ports providing an efficient responsive network. Whether you are using data-intensive applications or have demanding workloads, these switches can guarantee a smooth flow of data, making it an ideal solution for diverse networking scenarios.

Zero Touch Provisioning for Quick Setup

Infinique’s I2050M series provide ZTP features through web and cloud for easy deployment. Using this feature the switches can discover and install necessary version files from a file server thus eliminating the need for manual setup during the initial setup. This helps reduce the configuration errors and accelerates the deployment process, while enhancing the overall network efficiency, making these switches an ideal choice for network administrators.

Smart Web Management for Easy Administration

The I2050M series offer a comprehensive set of management features and options to provide an easy way to manage tasks. These switches can be managed over Web and Cloud, and additionally provide support for MQTT protocol management. Using a desktop or mobile devices like tablets or smart phones, network administrators can effectively manage, monitor and maintain the switches for optimal network performance.

Industry Standards Compliance

The I2050M series switches are designed for industry standards and include various IEEE standards such as IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, and IEEE 802.3az. These standards make sure that your network operates with the latest technologies and is compatible with a wide range of networking equipment, providing interoperability and future-proofing your infrastructure investment.

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NETWORK MANAGEMENT FEATURES

Ports

Basic Port Configuration	Auto MDI/MDIX, Port Speed, Port Duplex, Port MTU(Jumbo Frame), Port Isolation, Port Mirroring, Port Based VLAN
MAC Address Management	MAC Address Aging Time, MAC Address Learning ON/OFF, MAC Address Learning Limitation, Static MAC Address, MAC Address Filter

Ring Protection

Spanning Tree Protocols	STP/RSTP/MSTP, BPDU Guard, BPDU Filter, Flap Guard, Loop Guard, Root Guard, TC Guard, BPDU L2protocol Tunnel
Other Protocols	G.8032 (Ethernet Ring Protection Switching)

Link Aggregation

LACP Configuration	LACP Link Aggregation, LACP Port Priority, LACP Load Balance
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Multicast

L2 Multicast Protocols	IGMP v1/v2/v3 Snooping
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Configuration and Management

Monitoring and Diagnostics	1:1 SPAN, N:1 SPAN, RSPAN, Flow-based Mirror, Ping, Tracert, DDM, VCT
Device Management	WEB (HTTP), Cloud, MQTT using Desktop or Mobile App
Zero Touch Provisioning	ZTP Through DHCP Server

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TECHNICAL SPECIFICATIONS

Non-POE Models

I2050M-16T-4G I2050M -24T-4G

General

10/100/1000 Ports	16x RJ-45 Ports	24x RJ-45 Ports
SFP 1G Ports	4x 1G Fiber Ports	4x 1G Fiber Ports
Console Ports	NA	
Host Support	IPv4 / IPv6 ready	
LED Indicator Status	Power: Yellow, System: Yellow, Network: Link/Act Yellow, SFP: Link/Act Green, PoE: Green	
Factory Reset Button	Yes	

Performance

Switching Bandwidth	40Gbps	56Gbps
Transmission	Store and Forward	
Forwarding Rate	39.06mpps	54.6mpps
Buffer Memory	3MBit	
Jumbo Frame	9600bytes	
MAC Addresses Table Size	8K	
MTBF	300,000 hours	

Power Management

Power Supply Type	Fixed	
Power Input	AC 100~240V 50~60Hz	
Max Power Consumption	21.6W	21.6W

Environment

Temperature (Celsius)	Operating: -5 °C to +45 °C; Storage: -40 °C to +70 °C	
Humidity	Operating: 10% to 90% non-condensing; Storage: 5% to 95% non-condensing	
Heat Dissipation (BTU)	49.8	69.6

Physical

Dimensions (WxDxH) mm	440x208x44.2	440x208x44.2
Weight	2.63Kg	2.75Kg
Mounting Options		

Standards and Compliance

Safety	CE/LVD EN 62368-1 RoHS
EMC/EMI	EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3
Green Energy (EEE)	IEEE802.3az Energy Efficient Ethernet Task Force
Lighting Protection	4KV

I2050M Series

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TECHNICAL SPECIFICATIONS

POE Models

I2050M-16P-4G-250 I2050M -24P-4G-370

General

10/100/1000 Ports	16x RJ-45 Ports	24x RJ-45 Ports
SFP 1G Ports	4x 1G Fiber Ports	4x 1G Fiber Ports
Console Ports	NA	
Host Support	IPv4 / IPv6 ready	
LED Indicator Status	Power: Yellow, System: Yellow, Network: Link/Act Yellow, SFP: Link/Act Green, PoE: Green	
Factory Reset Button	Yes	

Performance

Switching Bandwidth	40Gbps	56Gbps
Transmission	Store and Forward	
Forwarding Rate	39.06mpps	54.6mpps
Buffer Memory	4.1MB	
Jumbo Frame	9600bytes	
MAC Addresses Table Size	8K	
MTBF	300,000 hours	

Power Management

Power Supply Type	Fixed	
Power Input	AC 100~240V 50~60Hz	
Max Power Consumption	280W	400W
PoE Standard	IEEE802.3af/at	
PoE Ports	16	24
PoE Power Budget	250W	370W

Environment

Temperature (Celsius)	Operating: -5 °C to +45 °C; Storage: -40 °C to +70 °C	
Humidity	Operating: 10% to 90% non-condensing; Storage: 5% to 95% non-condensing	
Heat Dissipation (BTU)	971.77	1364.85

Physical

Dimensions (WxDxH) mm	440x208x44.2	440x208x44.2
Weight	3.73Kg	3.85Kg
Mounting Options		

Standards and Compliance

Safety	CE/LVD EN 62368-1 RoHS
EMC/EMI	EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3
Green Energy (EEE)	IEEE802.3az Energy Efficient Ethernet Task Force
Lighting Protection	4KV

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Ordering Information

Part Number	Description
I2050M-16T-4G	Infinique I2050M Series Layer 2 1G Smart Web Managed Access Switch, 16x 100/1000M Ethernet, 4x 1G SFP Ports, Single AC Power
I2050M-16P-4G-250	Infinique I2050M Series Layer 2 1G Smart Web Managed Access Switch, 16x 100/1000M PoE+ Ethernet, 4x 1G SFP Ports, 250W PoE Budget, Single AC Power
I2050M -24T-4G	Infinique I2050M Series Layer 2 1G Cloud Managed Access Switch, 24x 100/1000M Ethernet, 4x 1G SFP Ports, Single AC Power
I2050M -24P-4G-370	Infinique I2050M Series Layer 2 1G Cloud Managed Access Switch, 24x 100/1000M PoE+ Ethernet, 4x 1G SFP Ports, 370W PoE Budget, Single AC Power

Customer Support, Service and Warranty

Infinique network switches come with a standard one-year limited hardware warranty that covers repair or replacement of parts. Cloud and Software: 90 days, can be extended with support contract