Series 7
Fibre Ethernet Switches

SILVERNET
WIRELESS-NETWORK-SOLUTIONS

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WIRELESS-NETWORK-SOLUTIONS

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01 Network Solutions

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We provide customers with rugged industrial grade network communication products to ensure efficient, stable and reliable operation between system networks.

- Security Emergency
- Network Security
- Intelligent Education

Smart City

- Power Industry
- Petroleum and Petrochemical
- New-energy Vehicles

Intelligent Energy

- Rail Traffic
- Highway

Intelligent Transportation

- Intelligent Manufacturing
- Intelligent Factory

Industrial Automation

1.1 Smart City

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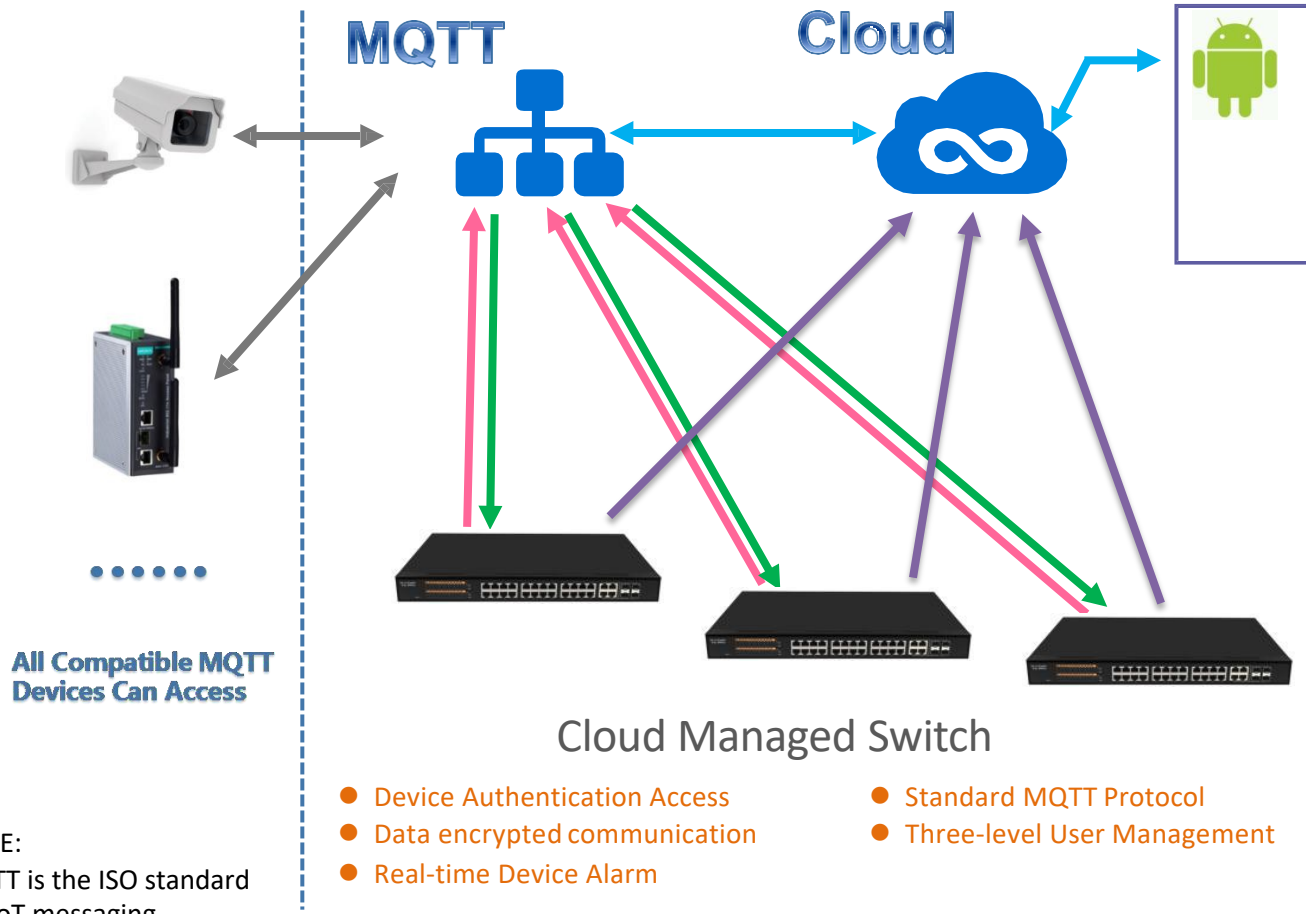
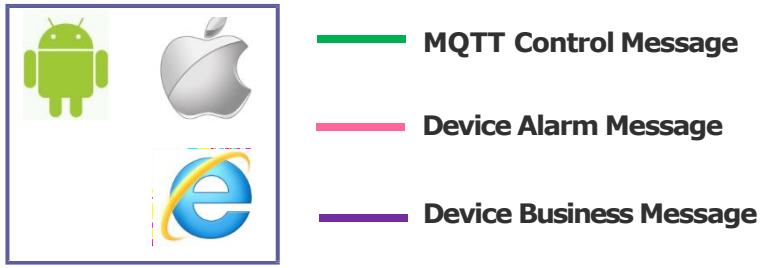
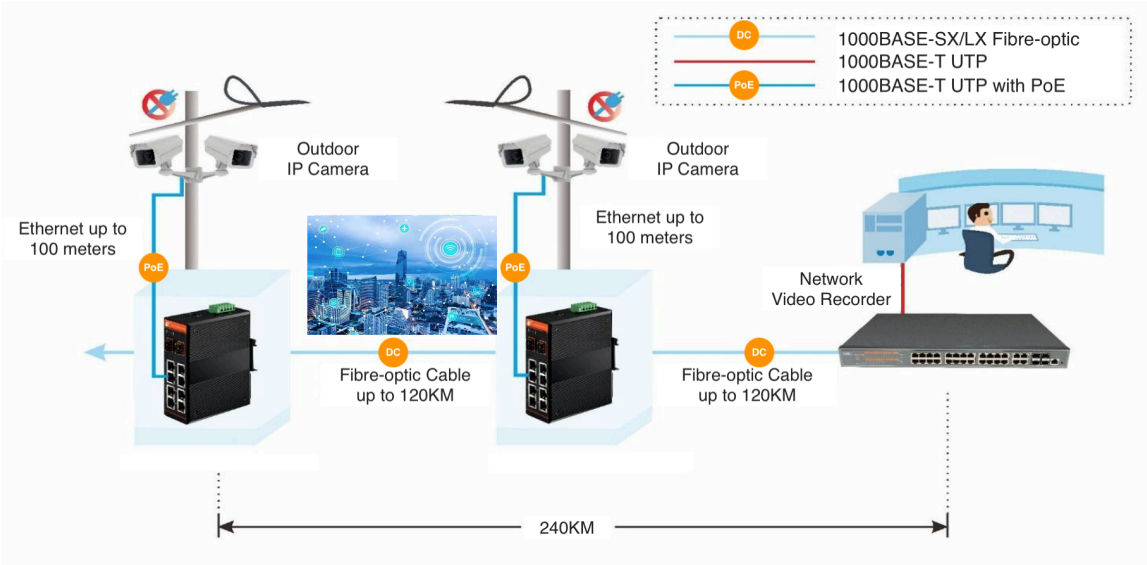
The construction of smart cities make full use of emerging technologies - the Internet of Things, the Internet, Cloud Computing, and Intelligent Science.
We can build a complete city network including city sub-areas, helping you to quickly build a safe and reliable smart city.







NOTE:
MQTT is the ISO standard for IoT messaging

1.2 Intelligent Transportation

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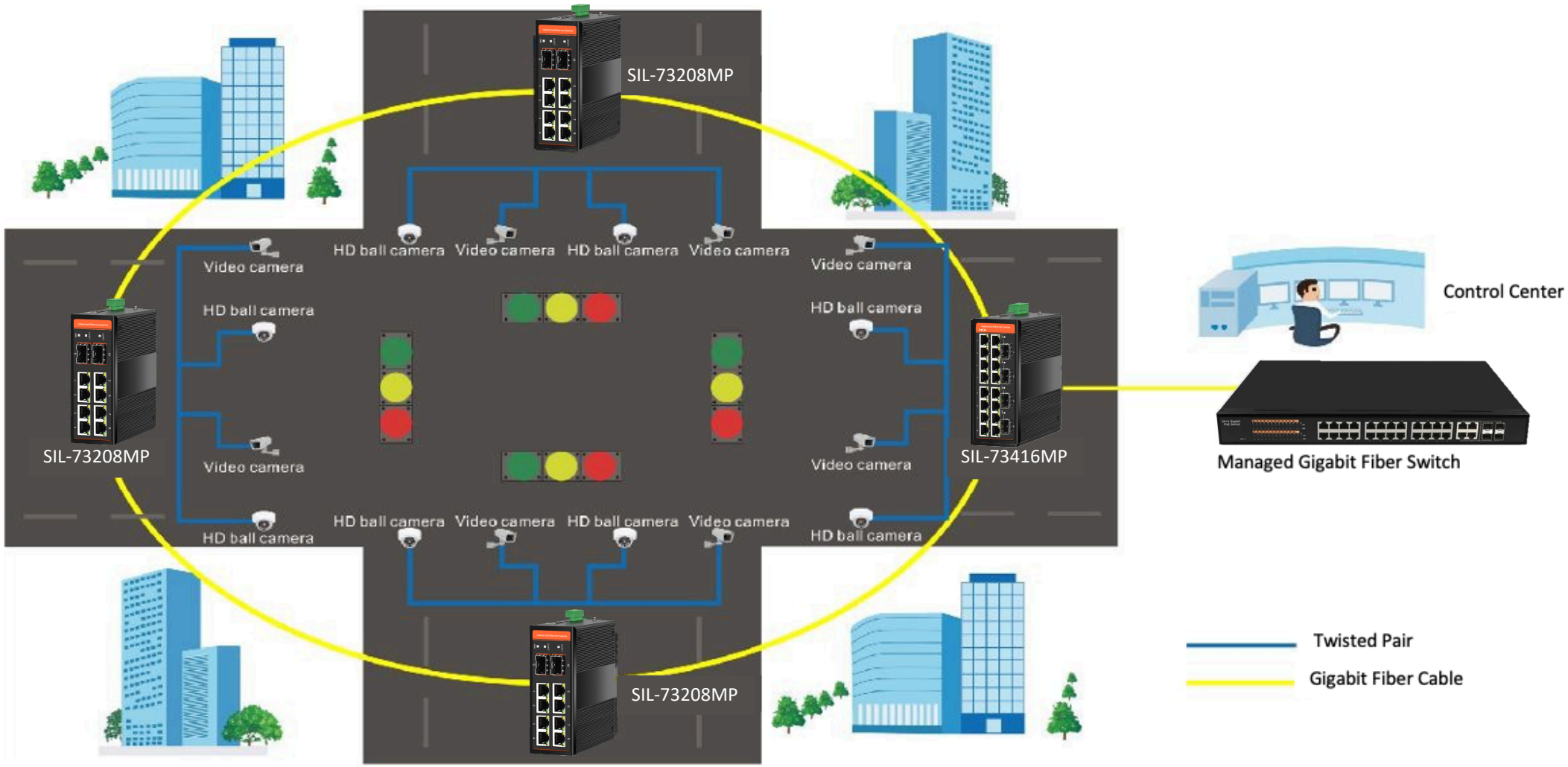
The Intelligent Transportation System (ITS) provides communications and technology to all commuters to ensure safe, convenient, comfortable, efficient and environmentally friendly travel.



1.3 Intelligent Energy

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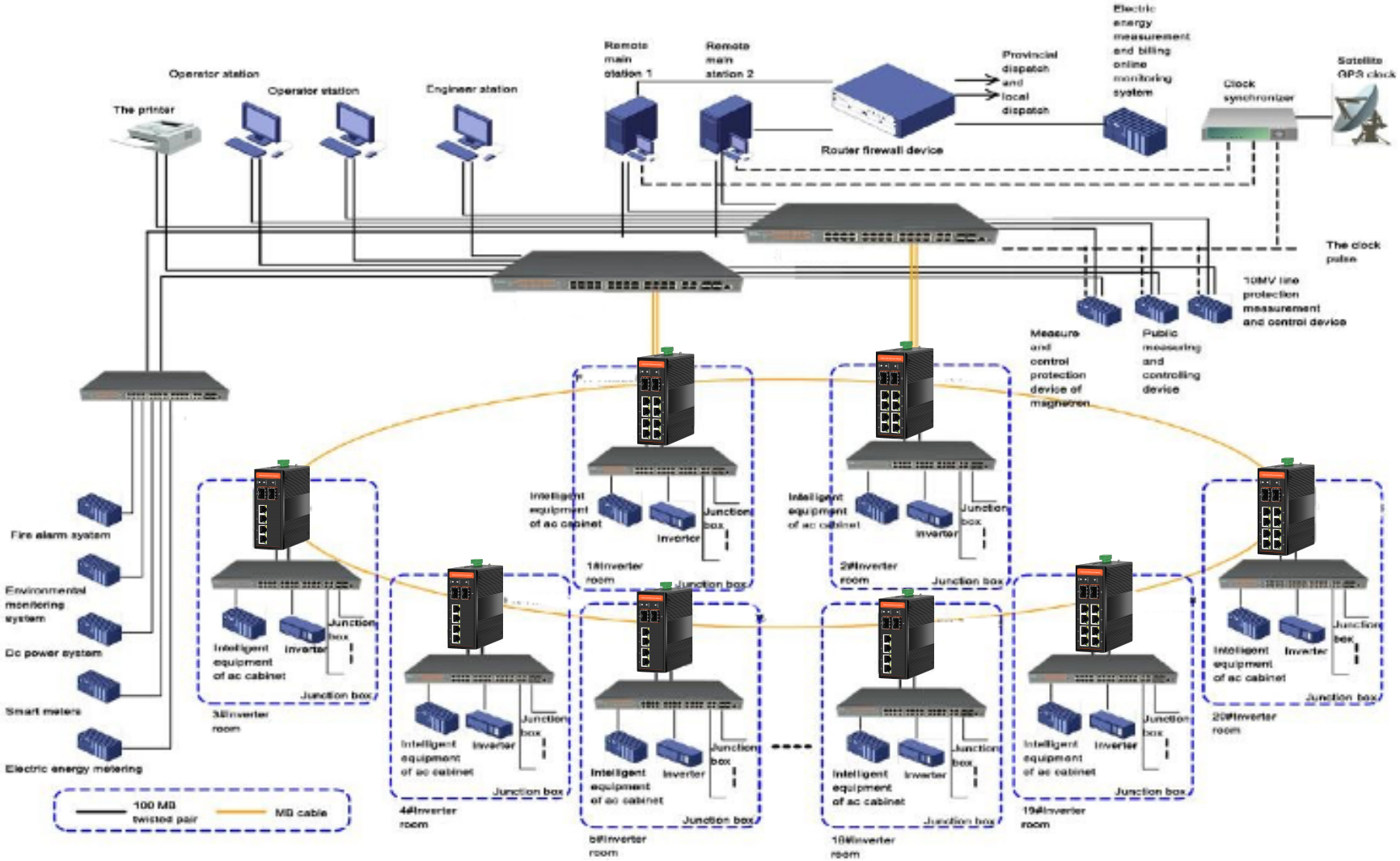
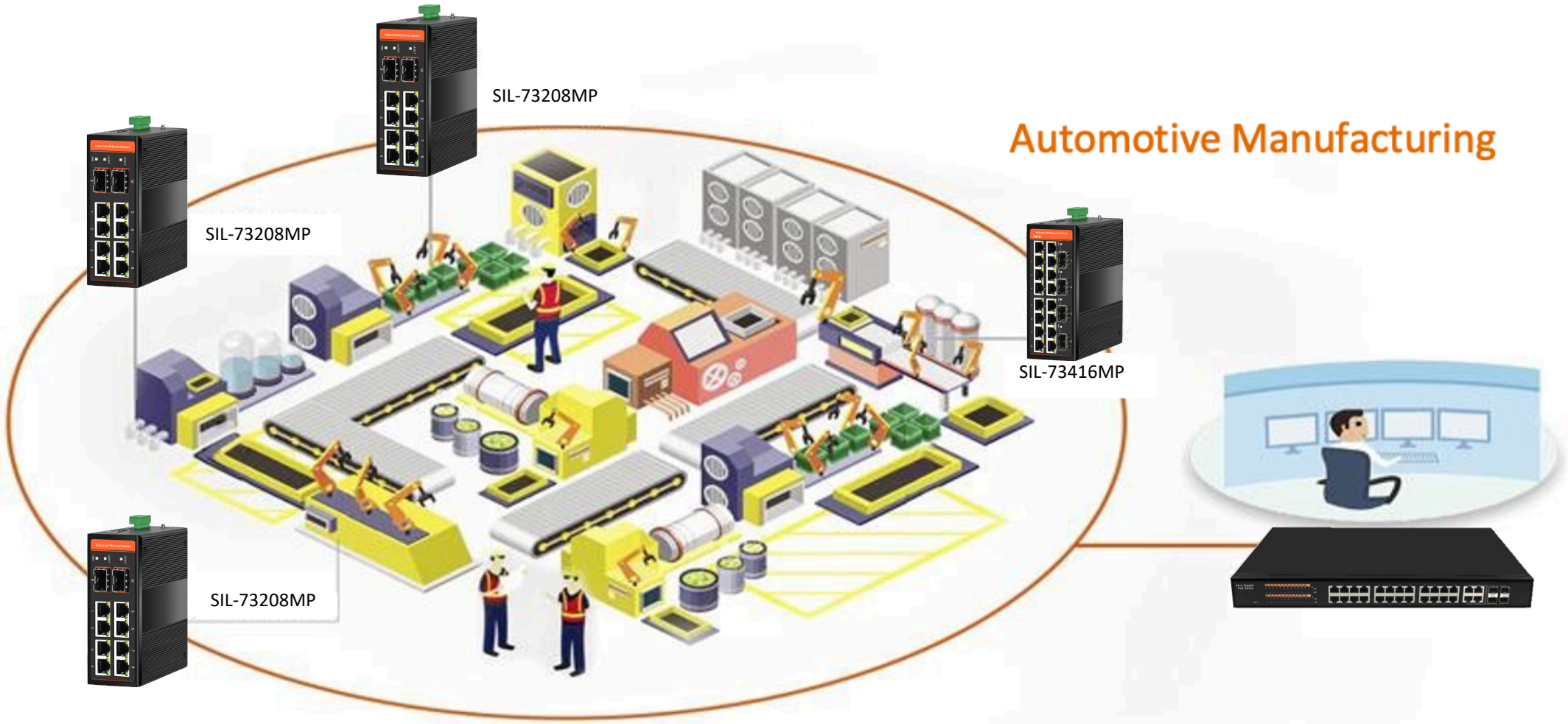
Solar Power monitoring systems ensure reliability and maintenance can be completed with on hand spares and in an environmentally friendly way, these are often in remote locations so must be reliable.



1.4 Industrial Automation

SilverNet relys on industrial ethernet to offer smart manufacturing, smart factories, industrial automation, mine communication networks and other field solutions.



02 Environmental Needs

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Many installation locations are harsh environments that a standard switch cannot withstand and end up failing. In mission critical systems a network failure can cause havoc.

Energy Industry

- Dust-Proof
- Anti-Knock
- Damp-Proof
- Water-Proof

Rail Transportation

- Lightning-Proof
- Anti-Shake
- ESD
- Damp-Proof

Security Monitoring

- Lightning-Proof
- Damp-Proof
- Dust-Proof
- High and Low Temperature

Intelligent Transportation

- High and Low Temperature
- Damp-Proof
- Corrosion Prevention
- Lightning-Proof
- Water-Proof

Photovoltaic Power Generation

- Desert and Gobi
- Heat Resistance
- Dust-Proof

Factory Automation

- ESD
- Dust-Proof
- Jamproof
- Mute no Fan

2.1 Reliability Highlights

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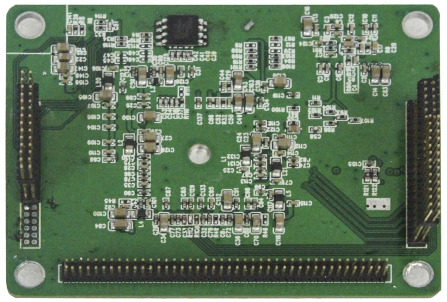
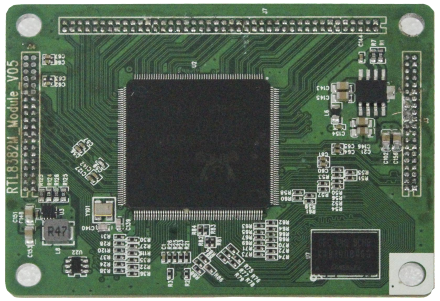
We only use high quality components and chipsets in the design of our product and to prove reliability, our Industrial switches have an 500,000 hr MTBF.





- ✓ Support Auto-MDIX and full/half duplex self-negotiation mode
- ✓ Support 10K bytes giant frame, compatible with various extension protocol
- ✓ Compliant with most management
- ✓ 8K MAC address table
- ✓ Support IEEE802.3az energy efficient Ethernet technology
- ✓ Support IPv6 Protocol
- ✓ Electric 8KV surge protection, easy to use in outdoor environment

2.2 Professional Testing

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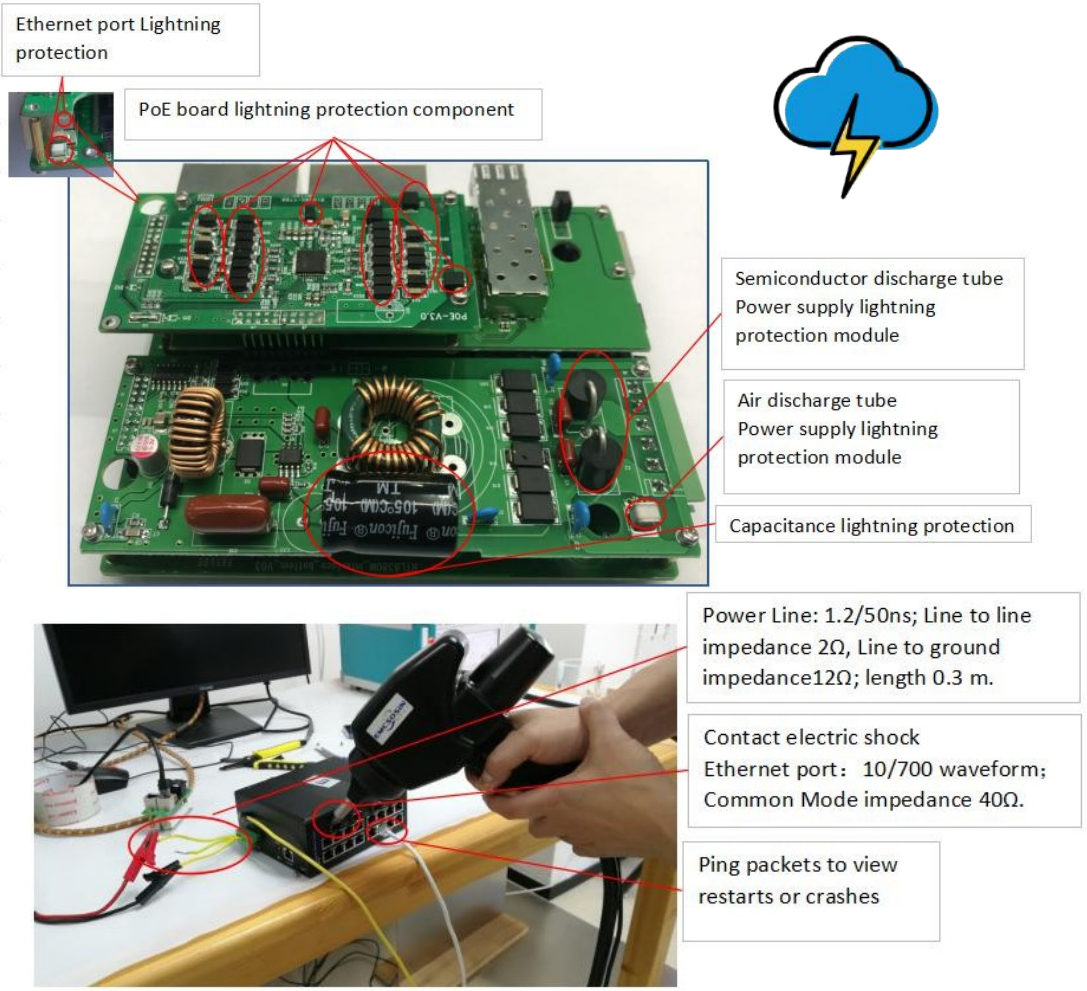
Lightning Protection Test	Switch		IMS	IMS+P	IUS	IUS+P	CMS	CMS+P	CUS	CUS+P
Power Supply Test	AC	CM	10KV	10KV	10KV	10KV	10KV	10KV	10KV	10KV
		DM	8KV	8KV	8KV	8KV	8KV	8KV	8KV	8KV
	DC	CM	8KV	8KV	8KV	8KV	8KV	8KV	8KV	8KV
		DM	6KV	6KV	6KV	6KV	6KV	6KV	6KV	6KV
Ethernet Port Test	AC	CM	8KV	6KV	8KV	6KV	8KV	6KV	8KV	6KV
		DM	1KV	1KV	1KV	1KV	1KV	1KV	1KV	1KV
	DC	CM	8KV	6KV	8KV	6KV	8KV	6KV	8KV	6KV
		DM	1KV	1KV	1KV	1KV	1KV	1KV	1KV	1KV
ESD Test	Contact Electric Shock		Restart	Restart	Flash	Flash	Restart	Restart	Flash	Flash
	Non-Contact Electric Shock		15KV	15KV	15KV	15KV	15KV	15KV	15KV	15KV

1. IMS+P: Industrial Managed Switch with PoE
2. IUS+P: Industrial Unmanaged Switch with PoE
3. CMS+P: Commercial Managed Switch with PoE
4. CUS+P: Commercial Unmanaged Switch with PoE
5. CM: Common Mode
6. DM: Differential Mode
7. Flash: 4/6/8KV-Flash 0.5-1s
8. Restart: 4/6/8KV-The system will restart and will not crash

Lightning Protection Test Stand:

1.Power Line:1.2/50ns; Line to line impedance 2Ω, Line to ground impedance12Ω; length 0.3 m.

2. Ethernet port：10/700 waveform；Common Mode impedance 40Ω.



2.3 Hardware Advantage

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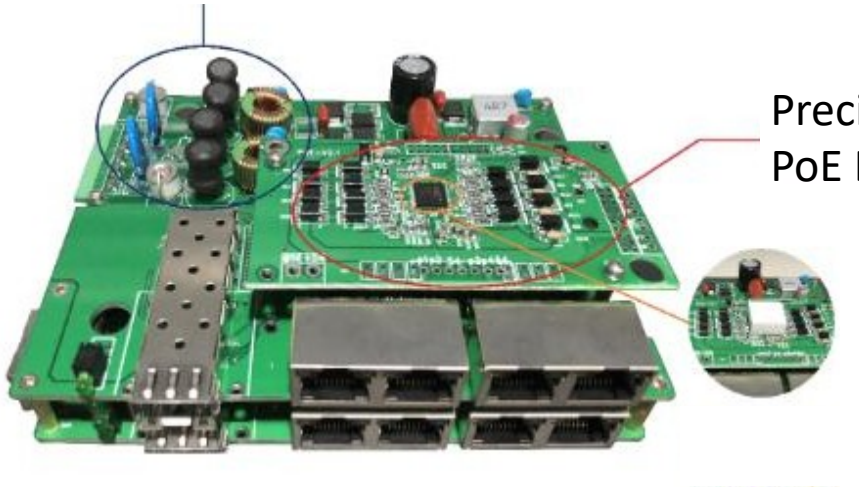
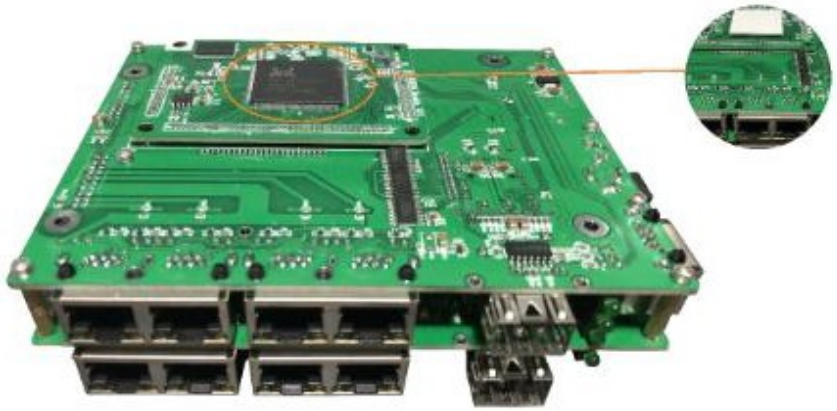
Extensive testing and forced failures mean that our hardware is incredibly rugged and reliable.

Power 8KV ESD and 4KV surge protection
Industrial Grade Lightening Prevention



Precise Power
PoE Board

Thermal silica connected to PoE and main chipset, closely fitted to the aluminum case, to achieve the most heat dissipation



03 Models and Features

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Series 7 Industrial PoE Switch

Unmanaged FE/GbE Industrial PoE Media Converter

- 1TX+1FX

SIL-73101P

Managed/Unmanaged FE/GbE Industrial PoE Switch
- 4TX+2FX

SIL-73204P

SIL-73204MP

Managed/Unmanaged FE/GbE Industrial PoE Switch
- 8TX+4FX

SIL-73208P

SIL-73208MP

Managed/Unmanaged FE/GbE Industrial PoE Switch
- 16TX+4FX

SIL-73416MP

Managed/Unmanaged FE/GbE Industrial PoE Switch
- 24TX

SIL-73024MP

Product Development

Managed/Unmanaged / Wifi FE/GbE Industrial PoE Switch

- 8TX+16FX+4Combo
- 16TX+8FX+4Combo
- 24TX+4Combo

Coming up in 2020 Q4 / 2021 Q1

3.1 Switch Naming Rules

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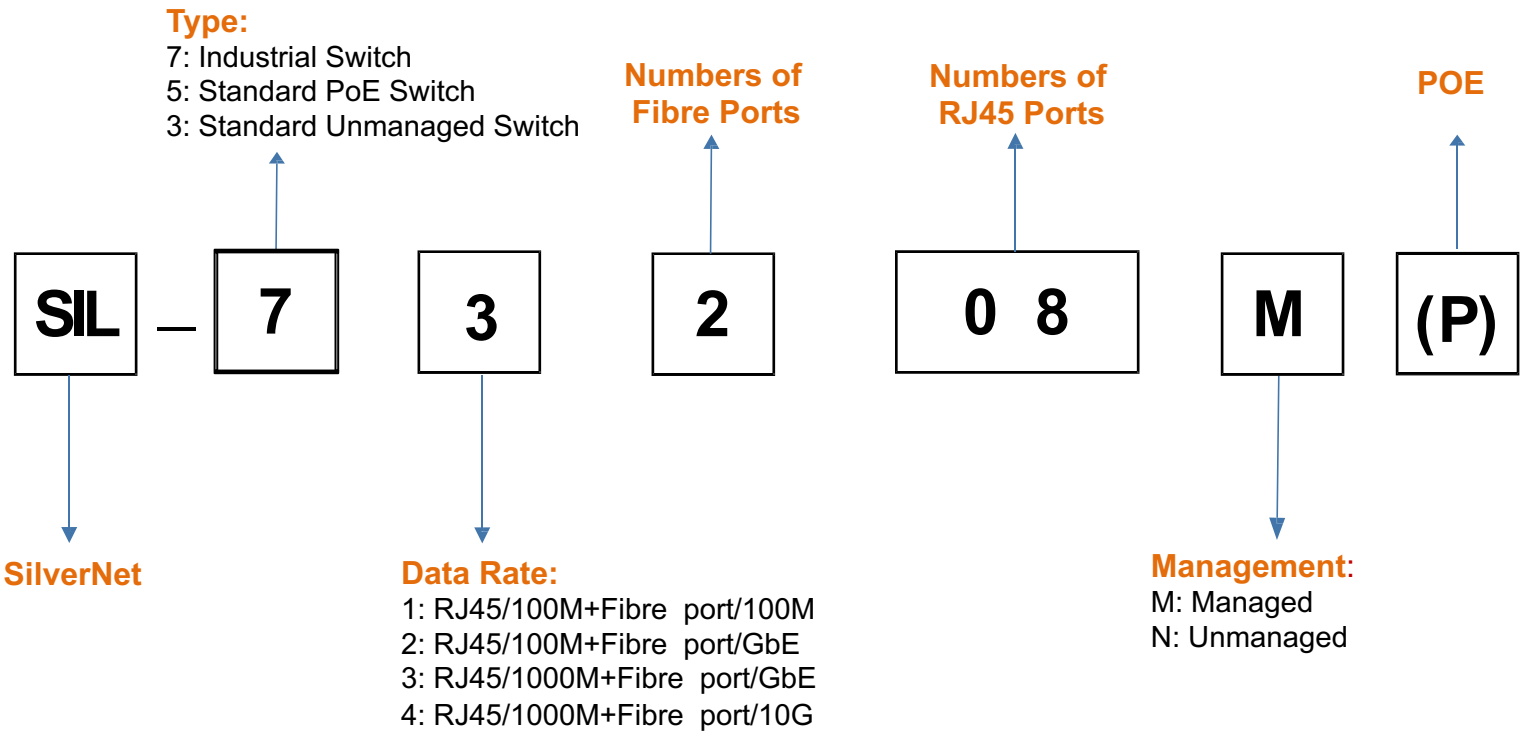
For simplicity we name our switches based on their hardware configuration, thus making identifying which product you have very simple.



Example

SIL-73416MP *Industrial Gigabit Managed Switch, 10/100/1000M, 16Port PoE+ GbE, 4x SFP port*

3.2 Range & FeatureTable

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Here's a brief table of our Series 7 **Industrial** and Series 5 **Commercial** network switches.

Industrial/PoE Ethernet Switch		SW Chipset	With PoE Chipset	Bandwidth	Max. Power per Port	Total Power Budget	Packet Buffer	Packet Length	MAC Address	Non-PoE Lightning Protection	With PoE Lightning Protection
SIL-73101P	1 x 10/100/1000M Base-TX + 1 x 100/1000M Base-FX SFP	RTL8370MBI	IC+(IP808)	20G	30W	60W	2M	9K	4K	8KV	6KV
SIL-73204P	4 x 10/100/1000M Base-TX + 2 x 100/1000M Base-FX SFP	RTL8370MBI	IC+(IP808)	20G	30W	240W	2M	9K	4K	8KV	6KV
SIL-73208P	8 x 10/100/1000M Base-TX + 2 x 100/1000M Base-FX SFP	RTL8370MBI	IC+(IP808)	20G	30W	240W	2M	9K	4K	8KV	6KV
SIL-73204MP	Managed, 4 x 10/100/1000M Base-TX + 2 x 100/1000M Base-FX SFP	RTL8382MI	IC+(IP808)	56G	30W	240W	4M	10K	8K	8KV	6KV
SIL-73208MP	Managed, 8 x 10/100/1000M Base-TX + 2 x 100/1000M Base-FX SFP	RTL8382MI	IC+(IP808)	56G	30W	240W	4M	10K	8K	8KV	6KV
SIL-73416MP	Managed, 16 x 10/100/1000M Base-TX + 8 x 100/1000M Base-FX SFP	RTL8382MI	IC+(IP808)	56G	30W	480W	4M	10K	8K	8KV	6KV
SIL-73024MP	Managed, 24 x 10/100/1000M Base-TX	RTL8382MI	IC+(IP808)	56G	30W	480W	4M	10K	8K	8KV	6KV

3.3 Series 7 Industrial Switch

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20Ports Industrial Managed Switch

SIL-73416MP

- ✓ 16 x 10/100/1000Base-T Gigabit Ethernet Port
- ✓ 4 x 100/1000Base-X SFP Slot
- ✓ 56Gbps Bandwidth, 8K MAC Address table, Jumbo Frame 10Kbytes
- ✓ SNMP Web Management Interface, Remote Management
- ✓ IGMP Snooping for Multicasting Network
- ✓ Port Mirroring, TP Auto-Negotiation, AUTO MDI-X
- ✓ IEEE 802.1p Qos,VoIP Qos,1Q-in-Q, IEEE 802.1x User Certification
- ✓ IEEE 802.3az energy efficient Ethernet technology
- ✓ Support IPv6 Protocol
- ✓ Loop protection to avoid broadcast loops
- ✓ Link Layer Discovery Protocol (LLDP)
- ✓ Electric 8KV surge protection

3.5 Smart Web Management

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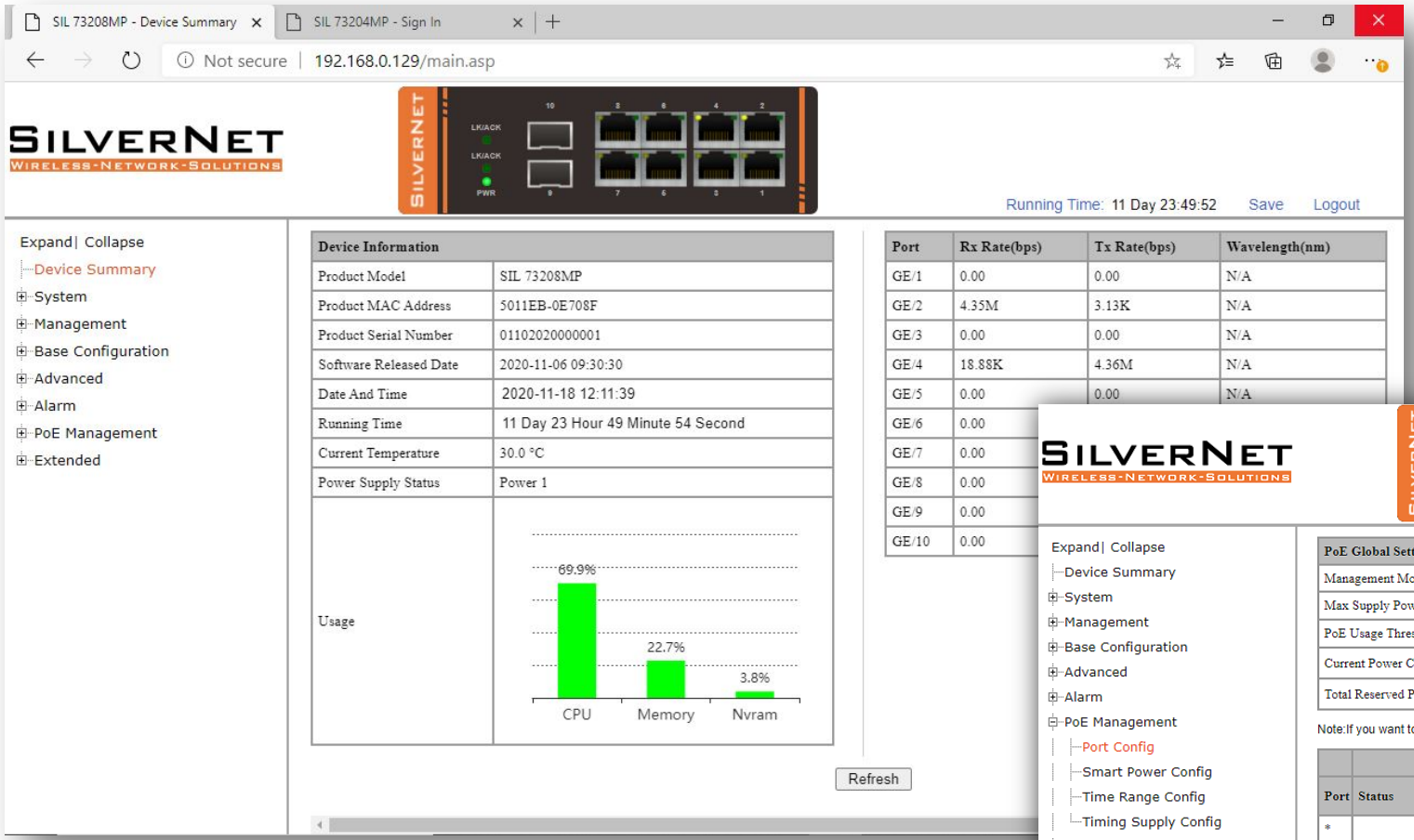

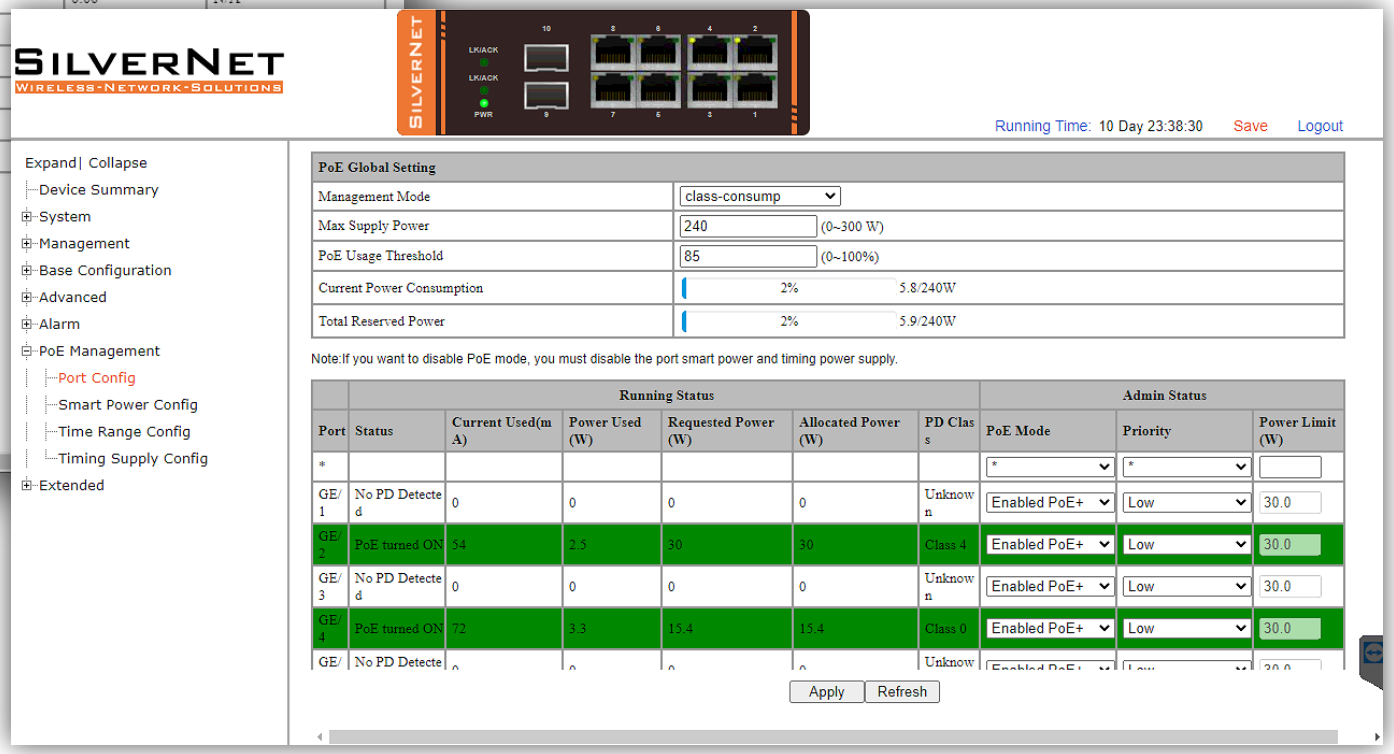

3.6 PoE Port Time Schedule for Energy Saving

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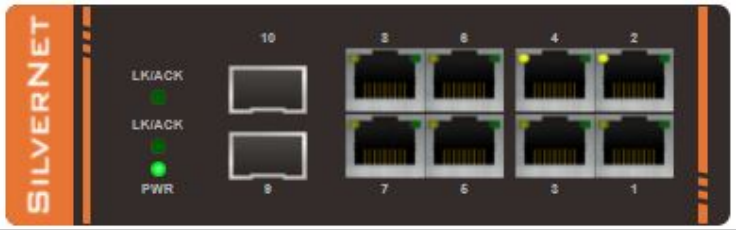
SIL 73208MP - Time Range Conf

Not secure | 192.168.0.129/main.asp

SILVERNET
WIRELESS-NETWORK-SOLUTIONS

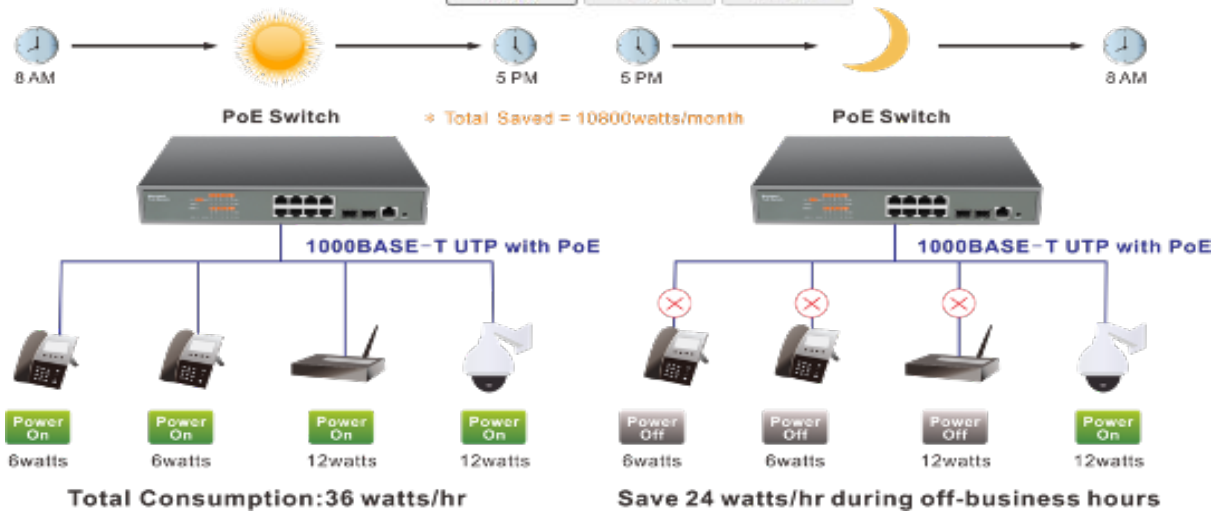


Running Time: 12 Day 00:09:49 Save Logout

- Expand| Collapse
- Device Summary
- System
- Management
- Base Configuration
- Advanced
- Alarm
- PoE Management
  - Port Config
  - Smart Power Config
  - Time Range Config
  - Timing Supply Config
- Extended

	Name	Status	Time
☐	T1	Absolute	2021-01-01 00:00:00 ~ 2021-01-01 00:00:00
☐	T2	Periodic	Mon - Sat 19:00:00 ~ 02:00:00
☐	T3	Periodic	Sun, Sat 00:00:00 ~ 00:00:00

Add Modify Delete



3.7 ERPS/Ring Management

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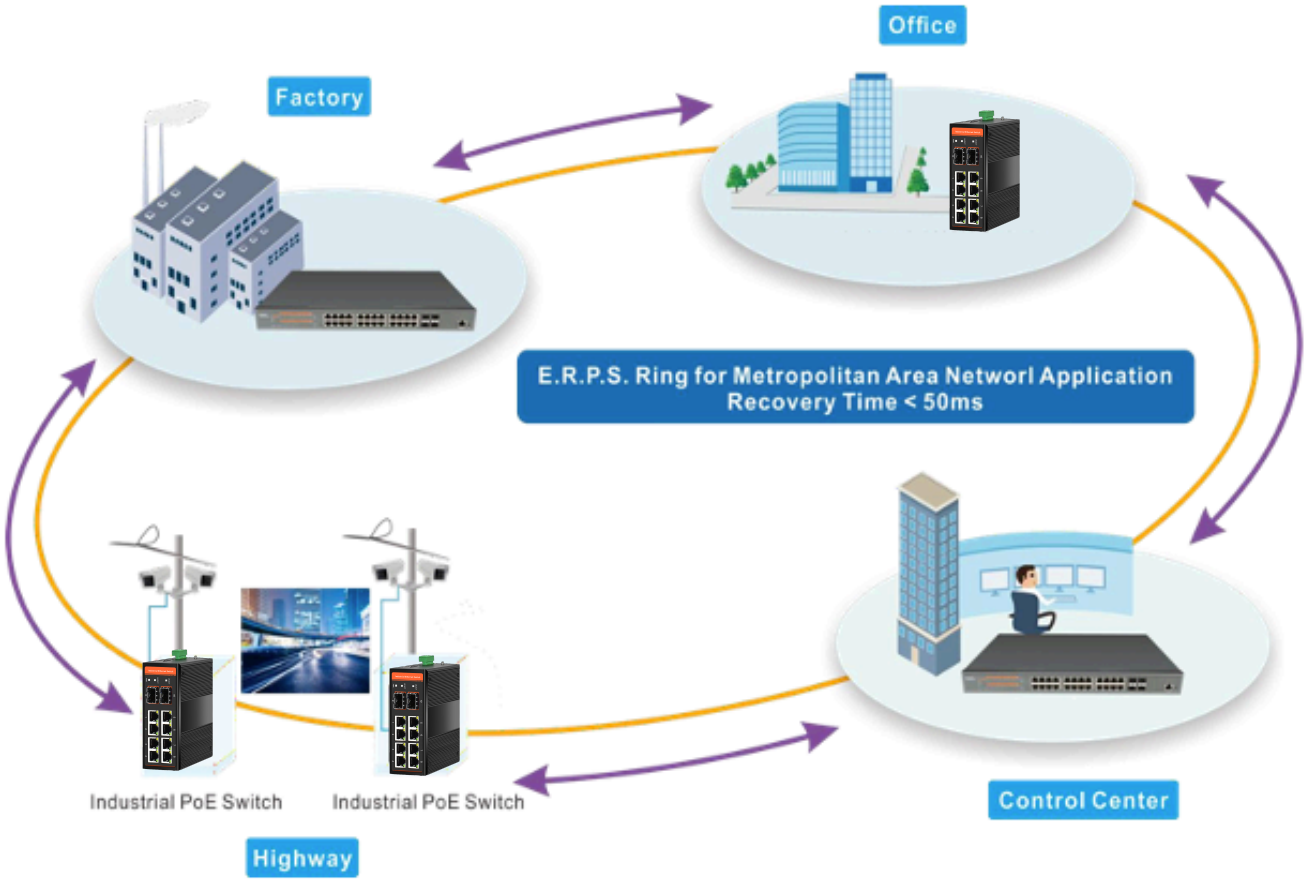
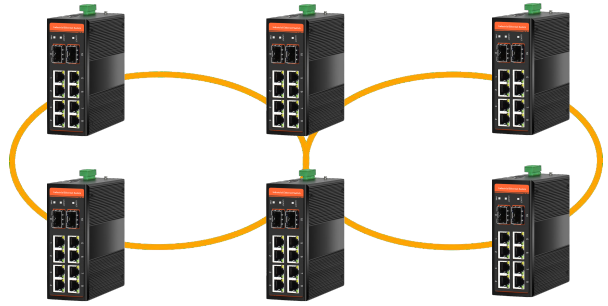
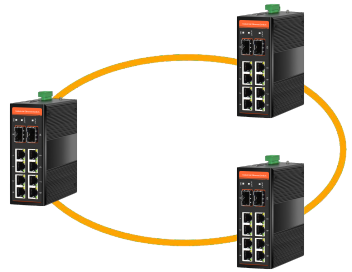
Redundant Ring, Fast Recovery for Critical Network Applications

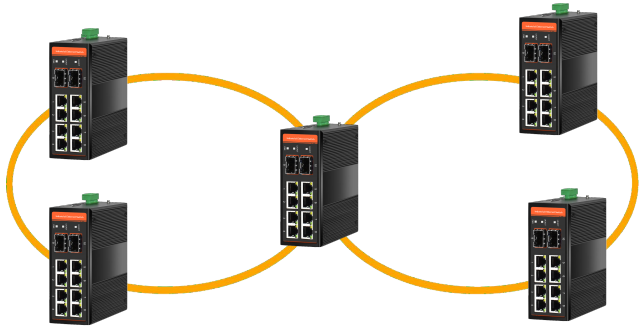




Intersecting Ring Network



Ring Network



Tangent Ring Network

Tangent Ring Network

3.8 Accessories - Optical Transceiver (SFP/SFP+/XFP/QSFP/CFP)

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155M 1.25G 2.5G 10G 40G 100G

Supports EEPROM editing

CISCO HUAWEI DELL NETGEAR IBM
Allied Telesis SMC ZTE中兴 ZyXEL hp
ARISTA Finisar Avago AVAYA Ruijie
PacketFront ADTRAN D-Link enterasys Juniper
LINKSYS by Cisco Alcatel-Lucent NORTEL NETWORKS BROCADE

3.9 Accessories- Power Supplies

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48v 60W

SIL-MDR-60-48

48v 120W

SIL-MDR-120-48

48v 240W

SIL-MDR-240-48

48v 480W

SIL-MDR-480-48

4 Why Choose SilverNet

SILVERNET
WIRELESS-NETWORK-SOLUTIONS

- **Over 15 Years of R&D Background –** Hardware and software are developed by SilverNet.
- **Medium Size Enterprise with a Global Perspective -** Annual sales growth and increased customer retention.
- **Success -** Many success stories and happy customers.
- **New Product Releases every Year -** To cater for the latest market trends.
- **Quality Control -** Perfect quality test and production line KPI assessment mechanism, repair rate 0.3-0.5%.
- **Technical Support Team -** Help with training, network design and technical support.

4.1 Successful Switch Deployment

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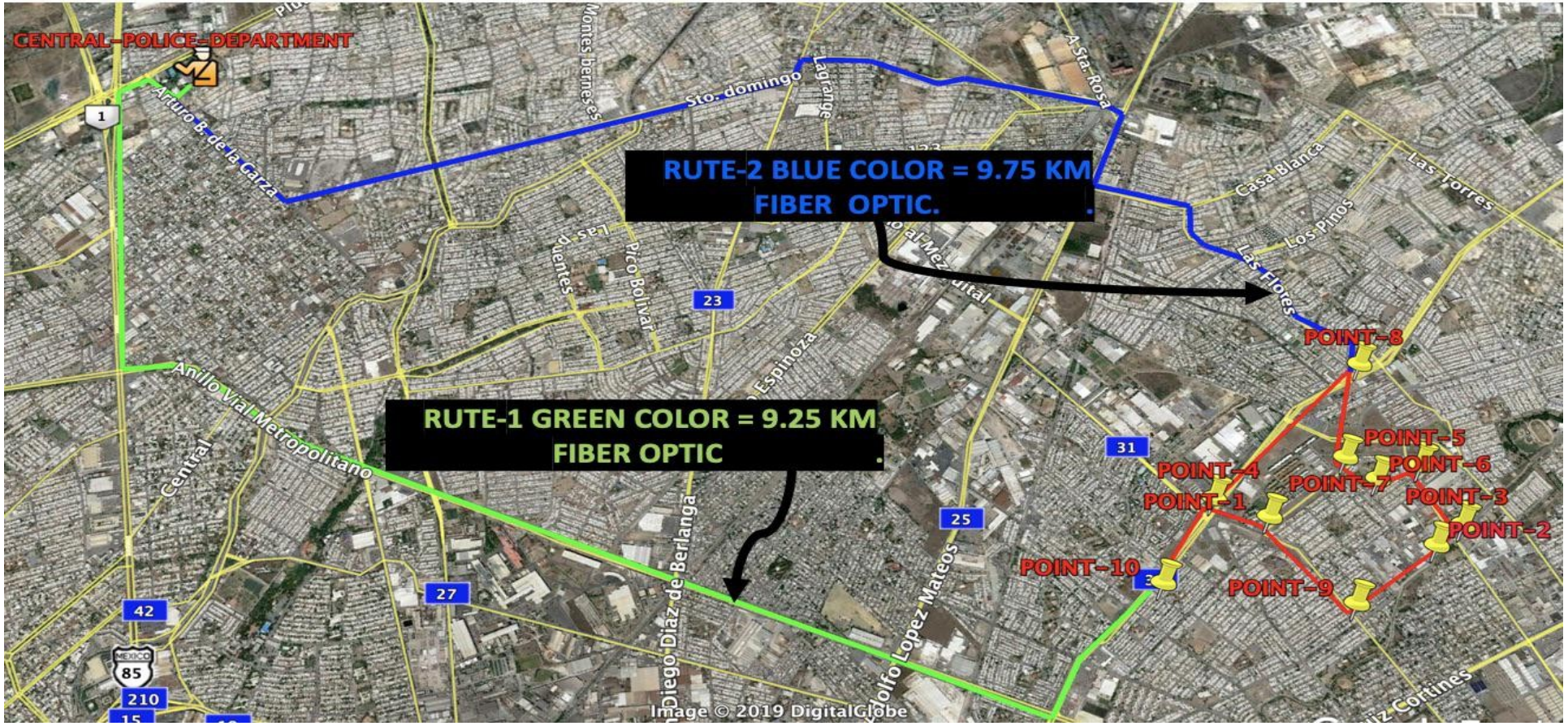
PROJECT TEST

TWO RINGS = GREEN RING / BLUE RING



4.1 Successful Switch Deployment

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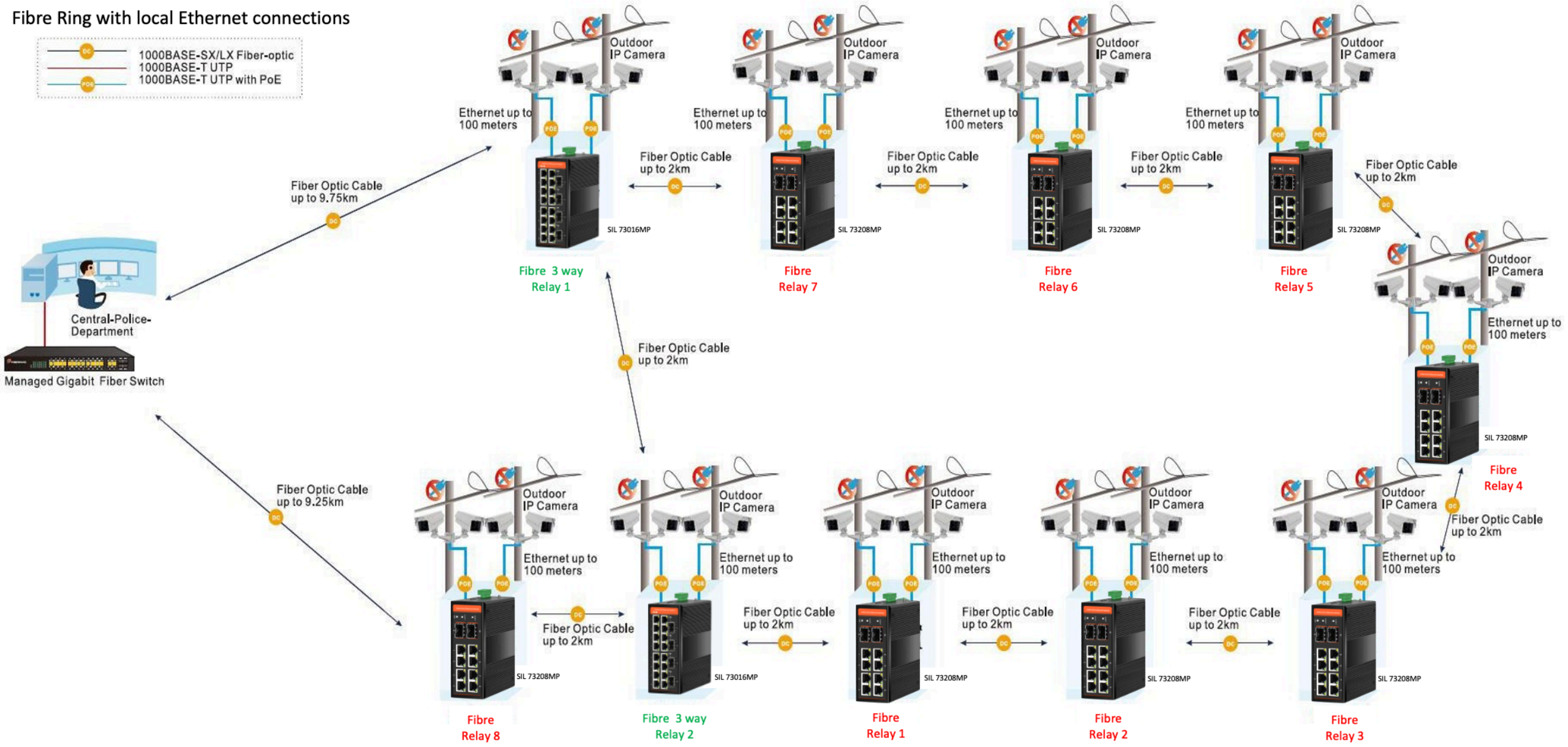
Fibre Ring with local Ethernet connections



4.2 Quality Control Assured

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High and Low Temperature Test

Data and Flow Test

Radiation Test

ESD Test

Immunity Test

Safety Test

ISO 9001
Quality Management

0.02%
Failure Rate

Industrial Chipset

The 3rd Party
Laboratory Certification

4.3 System Integration - Wireless

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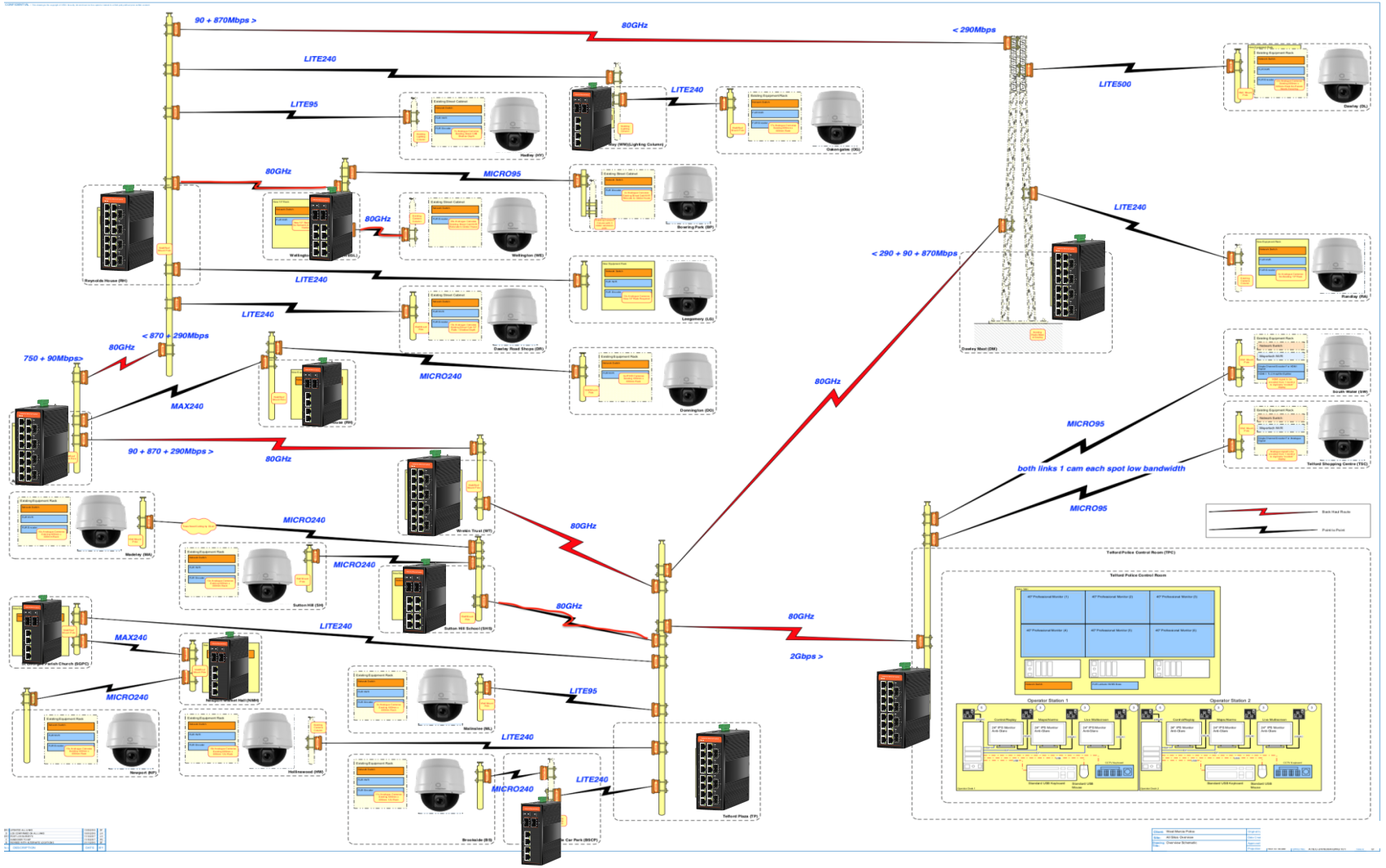
Our switches can integrate into many different system scenarios including a mixture of large scale wireless and fibre deployments.



4.4 System Integration - NMS

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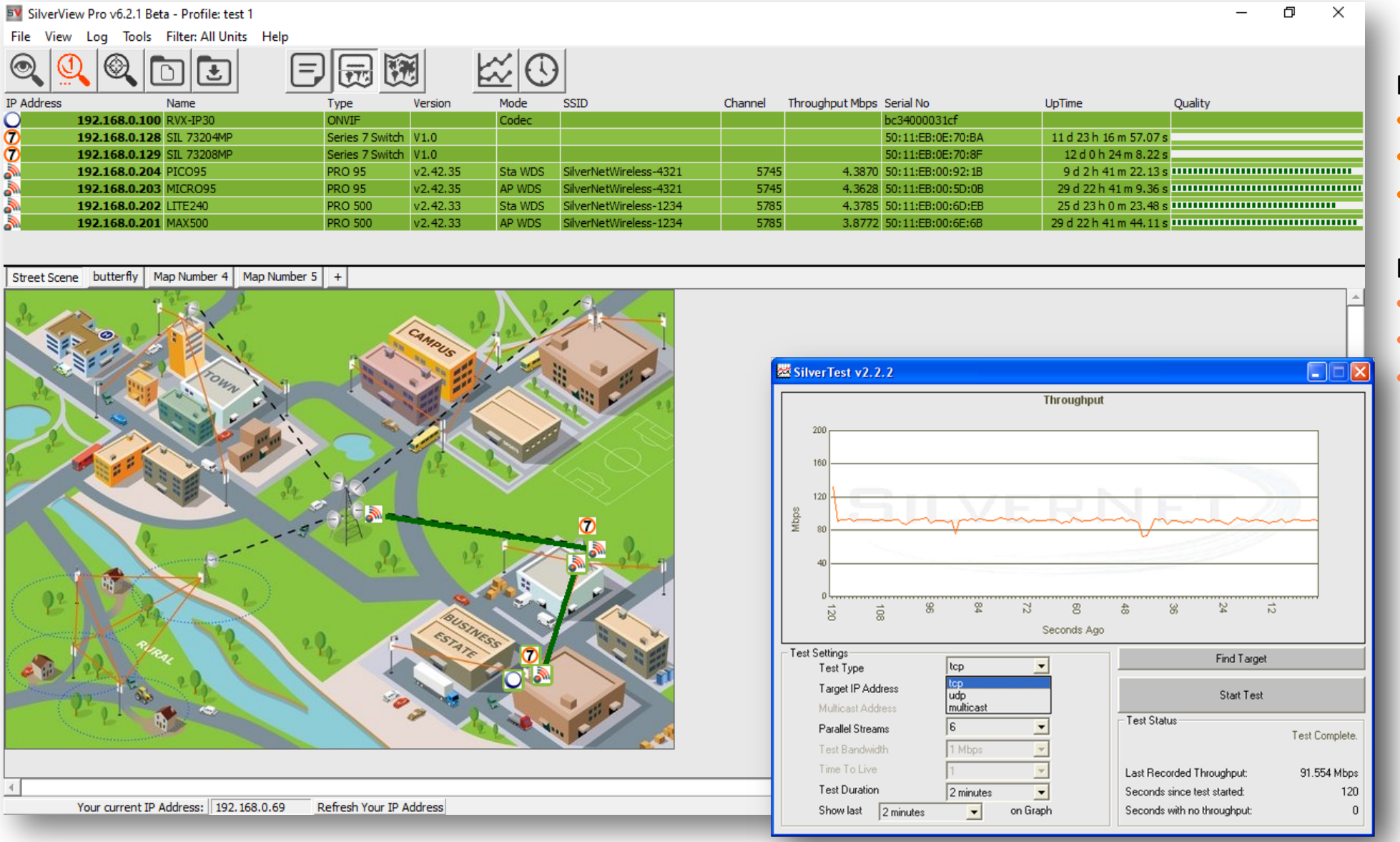

Real Time Monitoring

- See throughput
- Link Quality
- See your IP Address

Built in Data tester

- Throughput test your links
- Test Multiple Data streams
- Test TCP, UDP and Multicast modes

4.4 Long Term Partnerships

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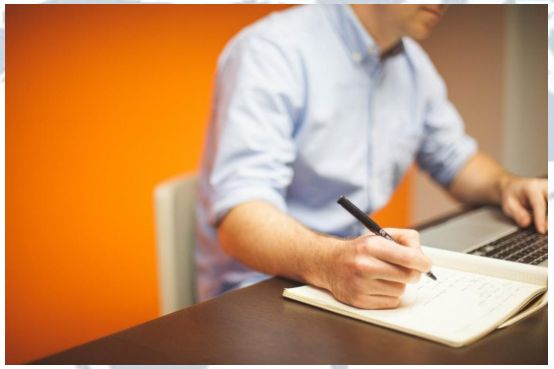

To Listen: How can we offer better services and products to support your business?

To Collaborate: How can we be YOUR FIRST CHOICE VENDOR in understanding your business needs?

To Share: Sharing SilverNet New Products Development, Service Plan, as well as our experiences to assist in creating improved synergies between our companies.

To be our Distributor
OR
To be our Agent
OR
To be our Sales Representative

SILVERNET

WIRELESS-NETWORK-SOLUTIONS

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www.silvernet.com

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