

# FiberHome POE Switch @ 3G Broadband

We do best in POE Wi-Fi offload 3G bandwidth

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# Agenda

- FiberHome Introduction
- FiberHome POE Switch



# Basic Information of FiberHome

## ◆ Company Profile

- Established on 1<sup>st</sup> July, 1974
- Headquarter: Wuhan, China
- Employee: Over 18,000+
- Shareholder: SASAC (State-Owned Assets Supervision and Administration Commission )

## ◆ Business Scope

- Product & Service
  - Optical Communication
  - Data Networking
  - Wireless Optimization
- FiberHome products have been deployed in more than 65 countries including the Southeast Asia, European Countries, US and Africa;
- Achieved 36% CAGR revenue growth since 2005



Headquarter in Wuhan, China



# Listed Subsidiary Companies

Two subsidiary companies in FiberHome group are listed in Shanghai Stock-Exchange and Shenzhen Stock-Exchange.

- FiberHome Telecommunication Technologies Co., Ltd. (Public Listed, Code 600498, SS )
- Accelink Technologies Co., Ltd. (Public Listed, Code 002281, SZ )

FiberHome has been chosen as China Stock Component Index by Bloomberg and Reuters



**Bloomberg Businessweek**

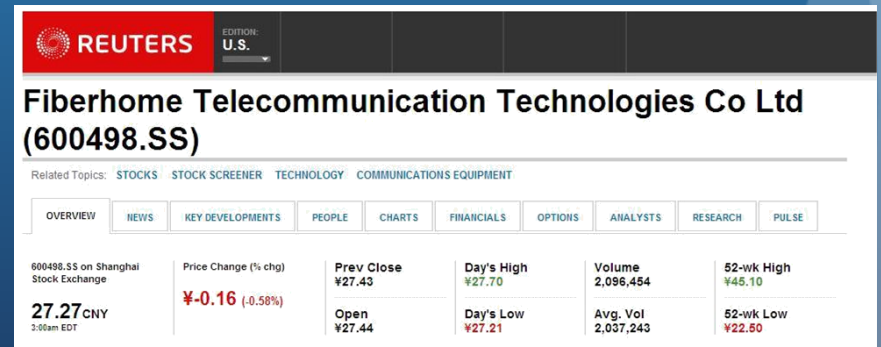
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INFORMATION TECHNOLOGY SECTOR | COMMUNICATIONS EQUIPMENT INDUSTRY June 15, 2011 7:29 AM ET

**FIBERHOME TELECOM TECH CO-A (600498:Shanghai)**

LAST **¥27.27** CNY CHANGE TODAY **-0.16 -0.58%** VOLUME **2.1M** 600498 On Other Exchanges▼

As of 3:15 AM 06/15/11 All times are local (Market data is delayed by at least 15 minutes).



**REUTERS** EDITION: U.S.

**Fiberhome Telecommunication Technologies Co Ltd (600498.SS)**

Related Topics: STOCKS STOCK SCREENER TECHNOLOGY COMMUNICATIONS EQUIPMENT

OVERVIEW NEWS KEY DEVELOPMENTS PEOPLE CHARTS FINANCIALS OPTIONS ANALYSTS RESEARCH PULSE

600498.SS on Shanghai Stock Exchange	Price Change (% chg) <b>¥-0.16 (-0.58%)</b>	Prev Close <b>¥27.43</b>	Day's High <b>¥27.70</b>	Volume <b>2,096,454</b>	52-wk High <b>¥45.10</b>
<b>27.27</b> CNY 3:00am EDT		Open <b>¥27.44</b>	Day's Low <b>¥27.21</b>	Avg. Vol <b>2,037,243</b>	52-wk Low <b>¥22.50</b>

# Human Resources



R&D:34%

- Total staffs: Over 18,000;
- 1 academician of Chinese Academy of Engineering;
- 100+ ITU-T experts including 15 ITU-T Vice Chairman;



Market and service  
:32%



Administrater:9%



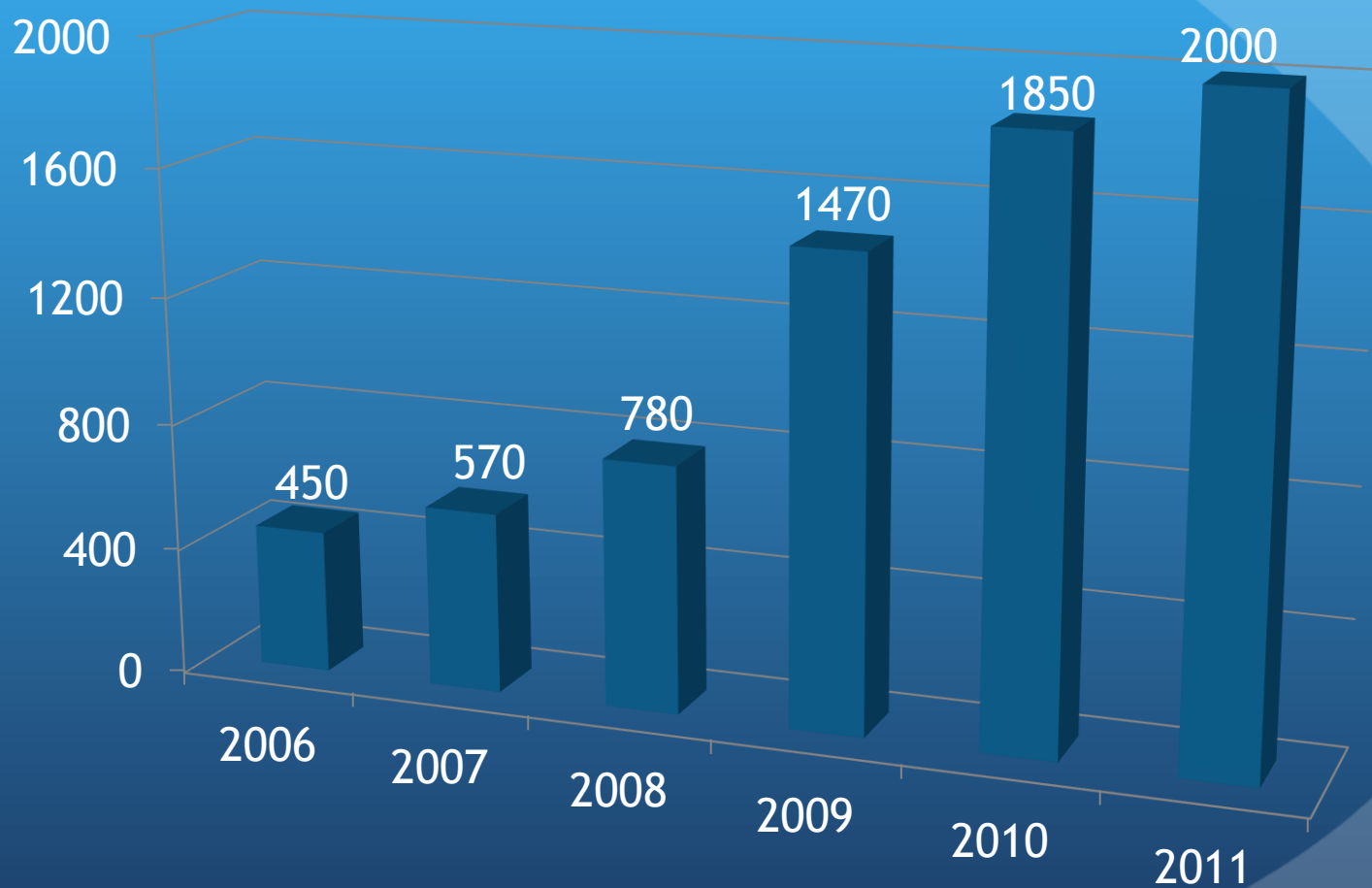
Supply chain:  
:25%



- Employee Average Age: 30
- 98% with university above degree;
- 35% with master degree;
- 27% with PhD degree

# Sales Revenue

Sales Revenue (Million USD)



# Production Facilities



- FiberHome Head office in China Optical Valley, Wuhan
- More than 5 manufacturing bases and 12 Plants around China; The Factory in Wuhan is around 300,000  $m^2$ .

# Global Sales Network

FiberHome Technologies  
(Headquarter)



- Global team: 20+ Local office, around 1000 engineers, over 200 project managers globally.





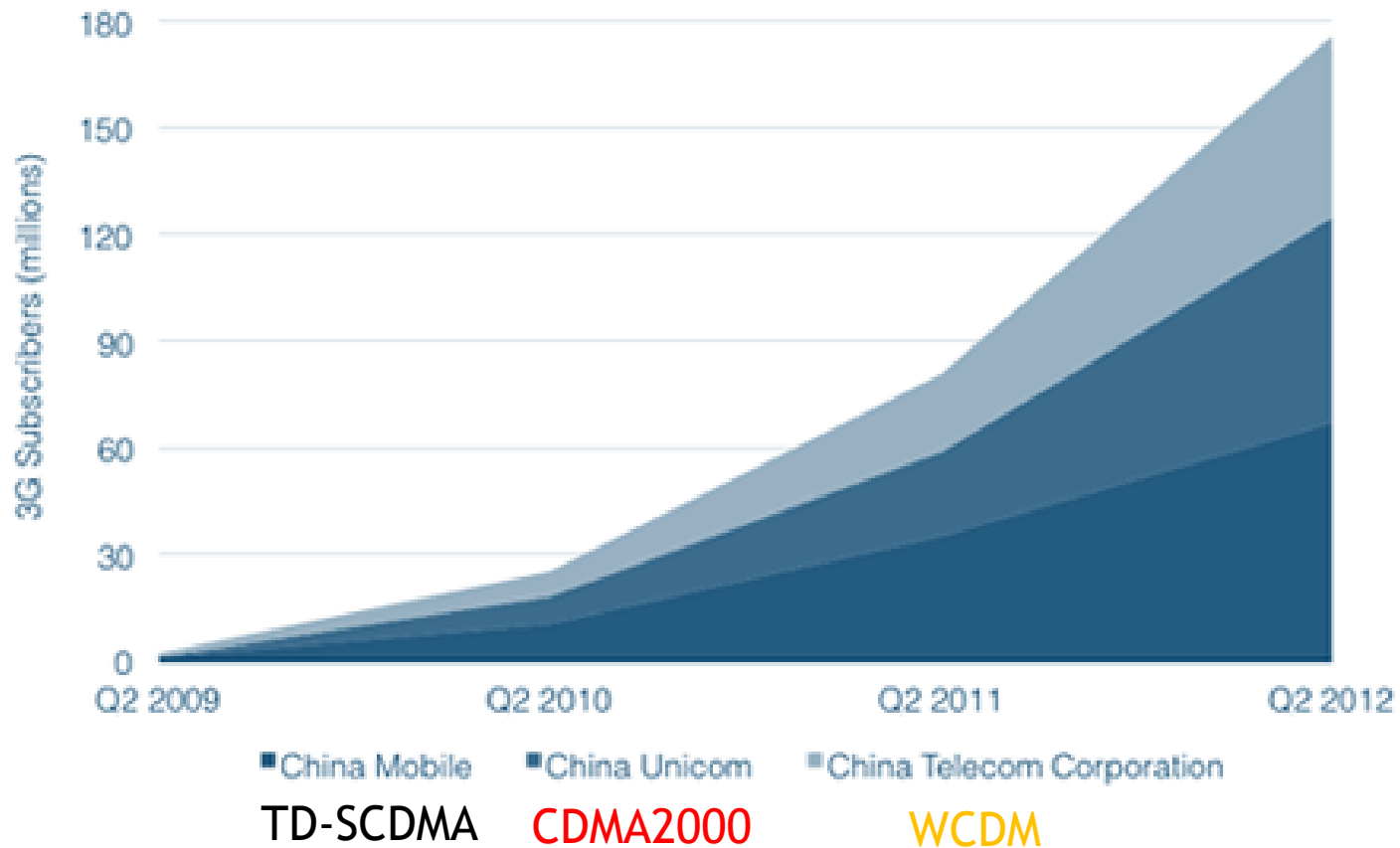
# Agenda

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- FiberHome POE Switch



# LTE is coming, but 3G is dominating

China 3G Subscribers by Operator, Q2 2009-Q2 2012



Source: TeleGeography

© 2012 PriMetica, Inc.

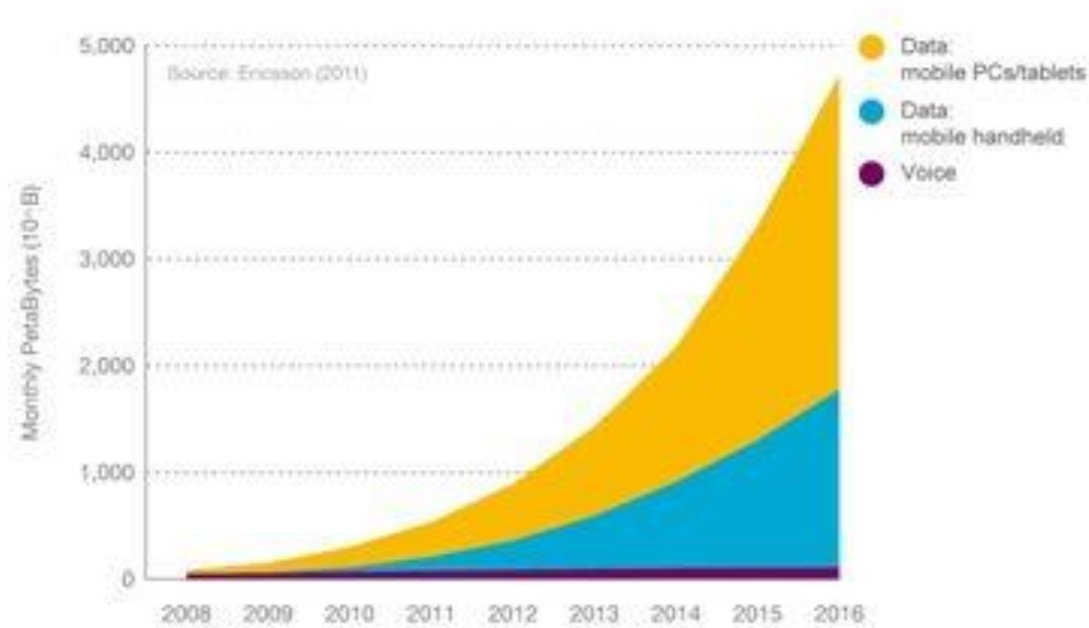
# Voice going down , Video going up



- 3G broadband Access from PC, smartphones bankrupt the bandwidth

# Mobile data offloading

- Mobile data traffic

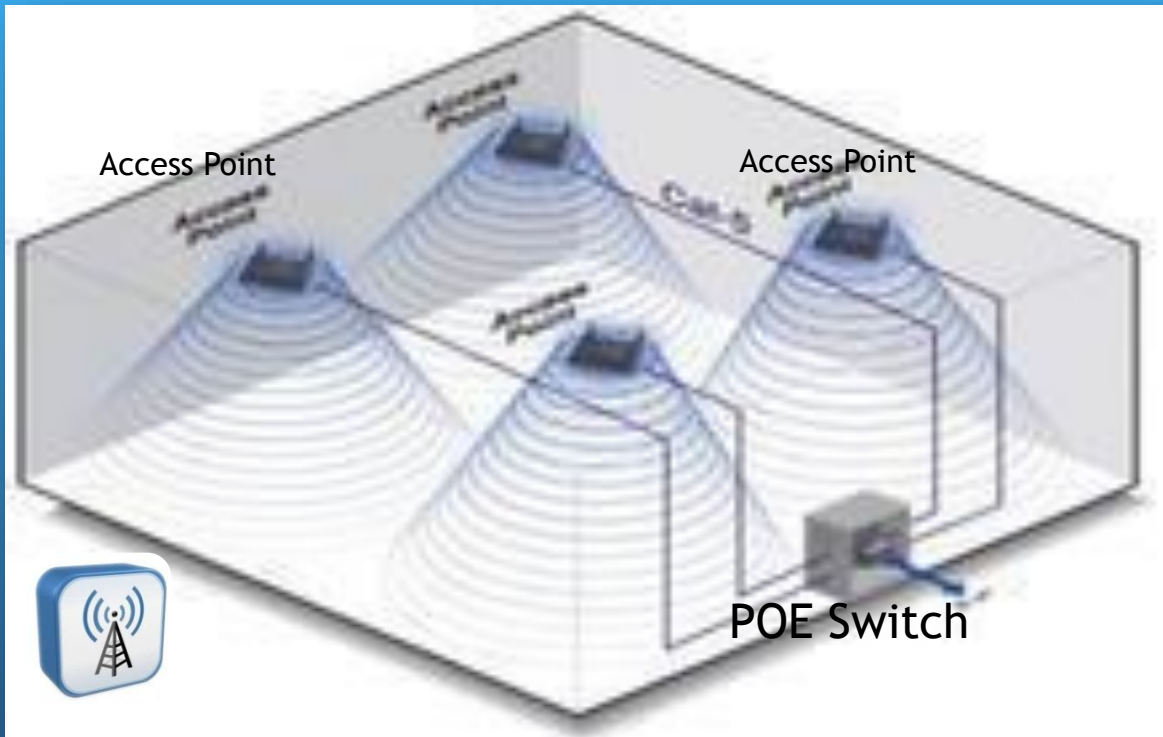


■ WLAN

■ Femtocells

■ CDNs

# WLAN Hotspot

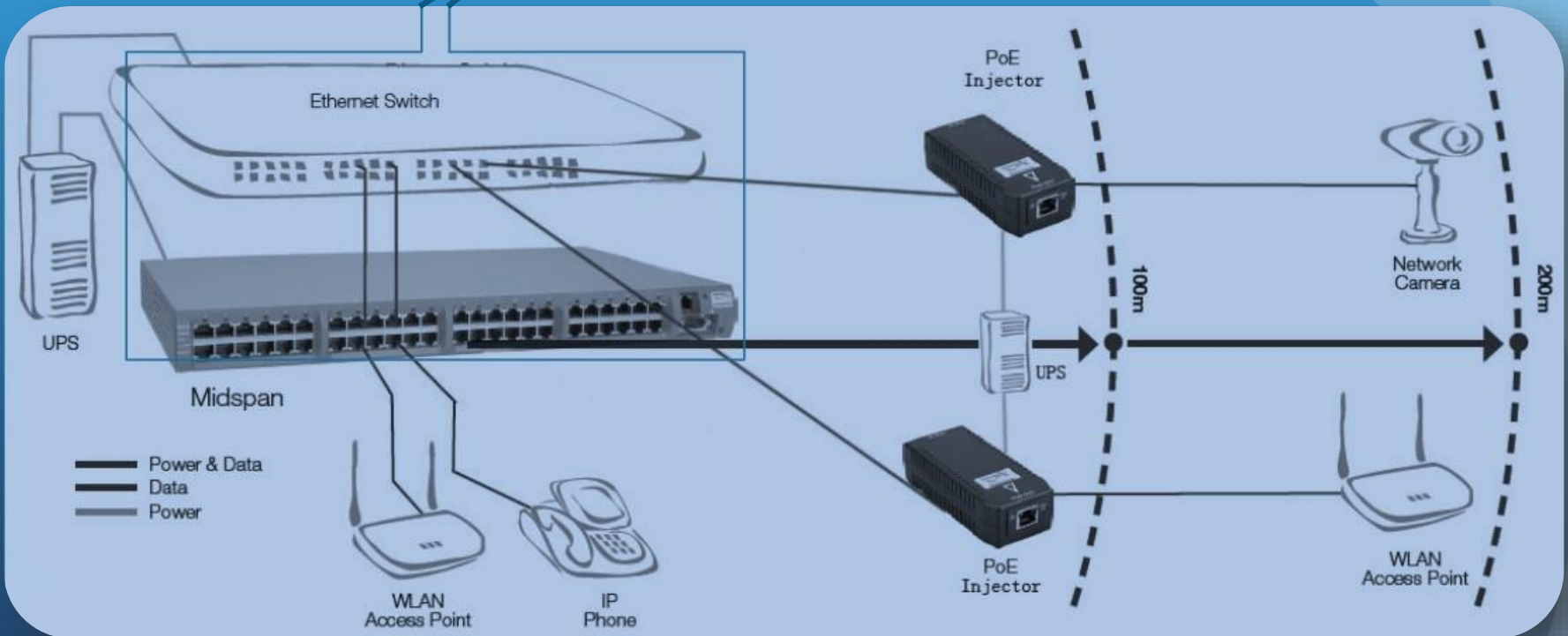


China Mobile  
Hotspot

## Wi-Fi City

POE Switch + Access Point

# PoE Switch VS Switch + Injector



# A comparison between different POE solutions

	POE switch	POE injector
Functionality	😊😊😊😊😊	😊
Performance	😊😊😊😊😊	😊😊
Networking capability	😊😊😊😊	😊😊😊
Reliability	😊😊😊😊😊	😊😊😊
Expansibility	😊😊😊😊😊	😊😊
Maintainability	😊😊😊😊😊	😊😊😊
Cost performance	😊😊😊😊	😊😊😊😊😊

# POE Switch



-- 2012 **Wifi 3G Offload Project** Indosat Mega Media(M2)

- Pass the strict test by the operators, Fiberhome Networks S2200ME-PAF series POE Switch has proved itself to be a reliable, functional equipment with good intercommunity and after-sale services, Fiberhome now is well known among Indosat group.
- Fiberhome overcome Switch competitors like HP, Cisco, Netgear etc. Deployed over 2000 in 2012.
- Fiberhome provide the DC power supply, and Competitors switch doesn't have.

Easy access without limits

Indosat is now the only internet Rp 25 thousand

Indosat Internet **Akses mudah tanpa batas**

KARTU INDOSAT  
Layanan i-Surf

KINI DENGAN INDOSAT INTERNET HANYA

Rp **25 RIBU**



JELAJAH MUDAH **3.5G**



Mobile Services

Mobile Features

Indosat Arena

Fixed Telephony

Customers

Gadgets

Corp. Solutions

About Indosat

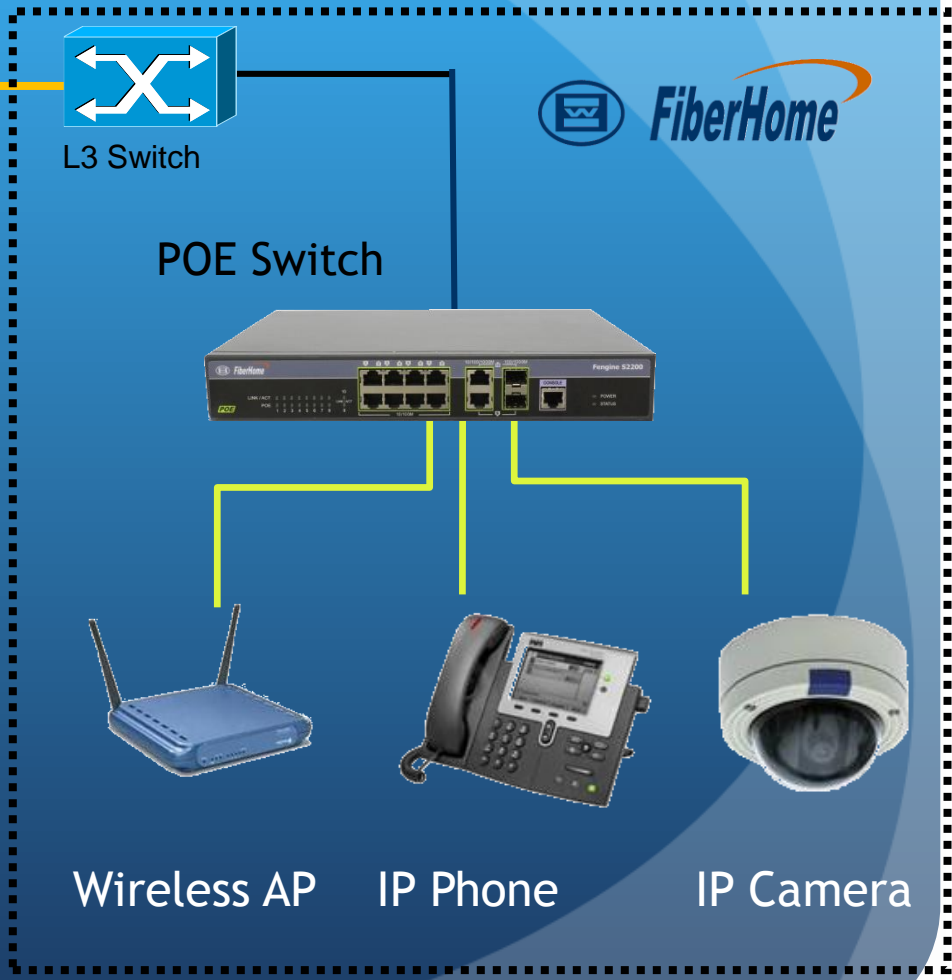
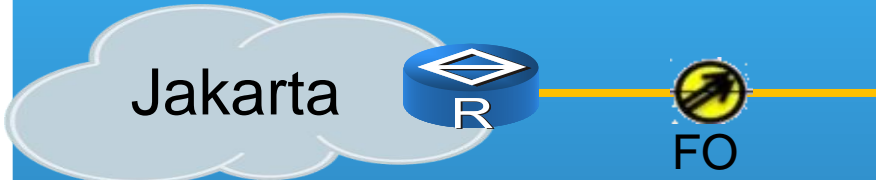




# POE Switch



-- 2012 **Wifi 3G Offload Project** Indosat Mega Media(M2)



<b>Comparison J9100</b>	<b>S2208ME-PAF</b>
Operating temperature 0~45°C	-10~55°C
POE Power 67W (HP cannot support all ports working in 15.4W module.)	124W Support IEEE802.3af/at, Offering 15.4Wx8 ports or 30Wx4 ports power to terminals;
Power Module External	Built-in

Wireless AP    IP Phone    IP Camera

# WLAN Solution

--2012 China Mobile **WLAN Coverage Project** for **Qingdao**

■ WLAN Project Construction Requirement of China Mobile

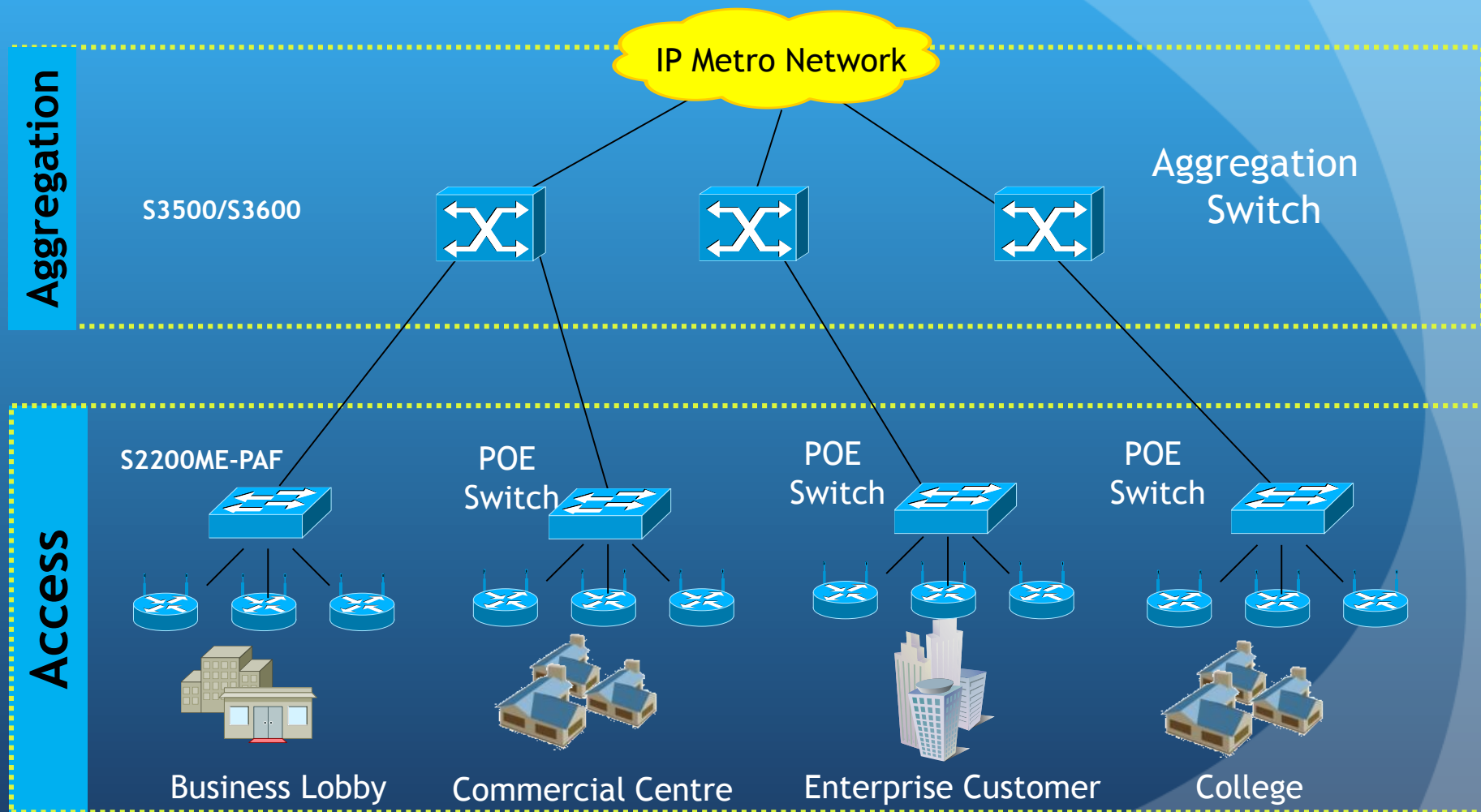
➤ WLAN project covers  
Mobile Business Lobby, Commercial  
Centre, Enterprise Customer,  
school, transportation etc.

- Bandwidth rate limiting
- Business fine bindings;
- International standard --  
IEEE802.3af/ IEEE802.3at



# WLAN Solution

--2011 China Mobile **WLAN Coverage Project** for Qingdao



# WLAN + PON solution



## --2010 China Mobile **WLAN Coverage Project** for Hunan Province

- The whole business operation, Hunan mobile focus on the development of mobile fixed network of construction, through the PON + wireless way realization mobile fixed network covering.
- Around this goal, Hunan mobile implement the WLAN project, cover the hot spots in the main urban areas, Commercial area and universities campus etc.

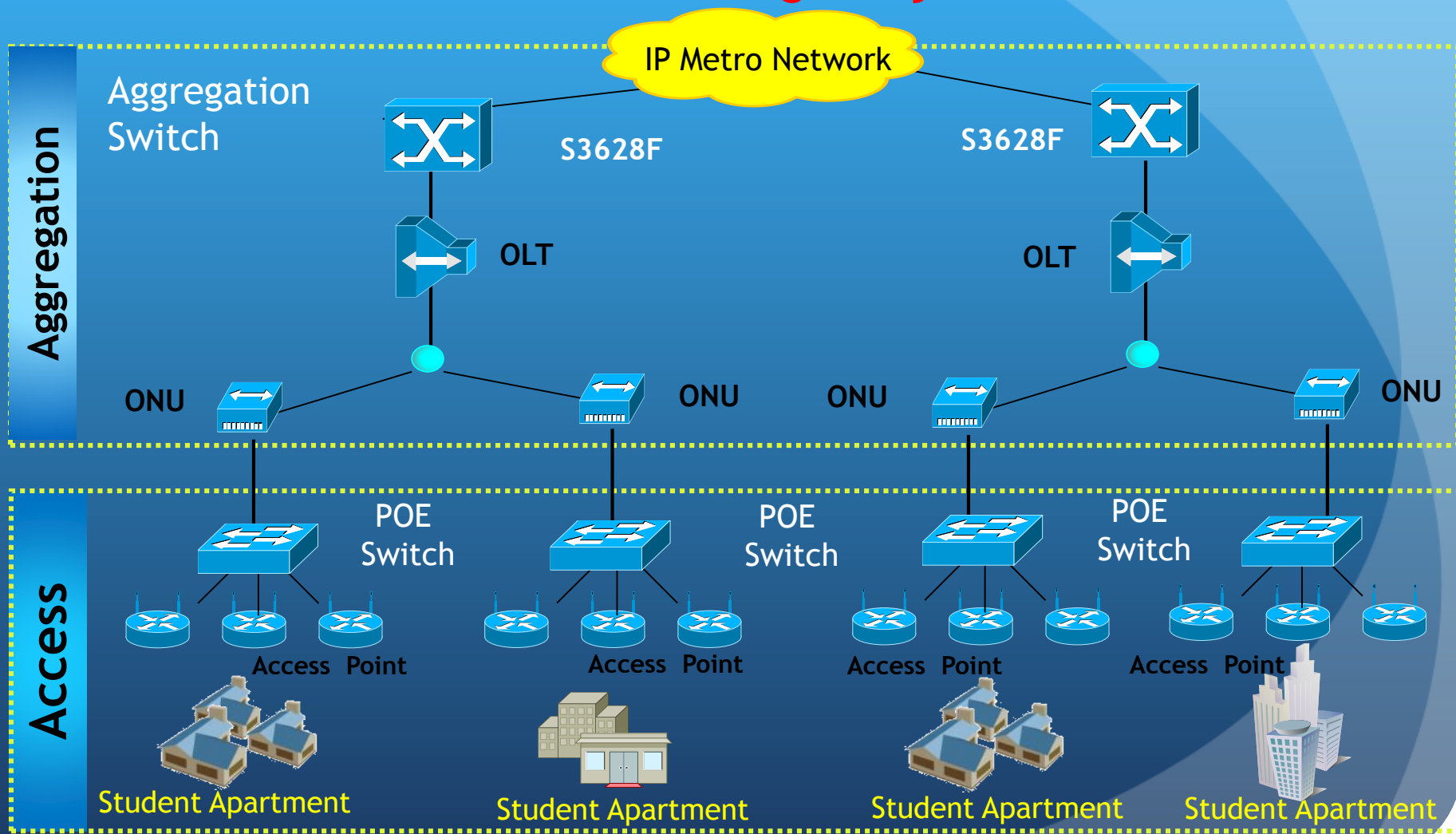
Slash price of voice and data, up to 50%!



# WLAN + PON solution



--2011 China Mobile **WLAN Coverage Project** for Hunan Province



# FiberHome PoE Switch

L2 8/16/24FE+2GE  
S2200ME-PAF



- L2 FE PoE Switch, Max. 8/16/24 PoE ports
- Support 802.3af, 802.3at
- Half ports can work with high-powered PD

L2 24GE+4GE  
S4800-28T-PE



- L2 GE PoE Switch, Max. 24 PoE ports
- Support 802.3af, 802.3at
- All ports can work with high-powered PD

L3 24GE+4x10G  
S3628-PE



- L3 GE PoE Switch, Max. 24 PoE ports
- Support 802.3af, 802.3at
- All ports can work with high-powered PD



## Benefits and Features

- High port density
- Ultra anti-lightning
- High performance forwarding
- Energy-saving and green
- Powerful multi-service capabilities
- Carrier-grade reliable protection

# Graphical User Interface





The screenshot displays the EasyDo Vview network management system interface. A 'Filter Group Create Dialog' window is open in the foreground. The main application window shows a hierarchical tree view on the left with categories like Network View, Device Configuration, CPU Information, Memory Information, Version Information, Time Information, Interface Configuration, Trunk Information, VLAN Configuration, QinQ Configuration, QoS Configuration, ACL Configuration, MAC Forwarding, Protection, Multicast Configuration, DHCP Configuration, IP Configuration, and STP Configuration. The 'Device Information' tab is selected, showing a table of properties for an Ethernet Switch (S3652F).

Property	Property Value
MAC Address	00:04:67:36:56:74
Description	S3652F
Device Name	S3652F
Hardware Version	1.0
Software Version	4.21
Operation Time	0Day2Hour1Minute20Second
Device Clock	2012/01/06 04:59:25
FTP Server	Close
Reboot Device	Please select
Config File	Please select

At the bottom of the interface, there are buttons for 'Create', 'Modify', 'Delete', 'Next Page', and 'Refresh'. The status bar at the very bottom shows: 'Server is connected', 'Operator: root', 'Server: 127.0.0.1', 'Area: Local', and '2012-07-03 10:35:59'.

Rich Network Element management

# Mainstream Vendors Product Comparison

POE Switch				
L2 FE	S2208ME-PAF	SP6510P8	SF100D-08P	E2520-8-PoE
	S2216ME-PAF	—	SF100D-16P	3100-16-PoE EI
	S2224ME-PAF	SP6824P	SF200-24P	E2520-24-PoE
L2 GE	S4800-28T-PE	SP6524P	WS-C2960S-24PS-L	—
L3 GE	S3628-PE	—	WS-C3750G-24WS-S25	2910-24G-PoE

## FiberHome Product Positioning

- **Service Provider:** Targeting at the WLAN matching market, making service backhaul and supplying power remotely possible for AP;
- **Business:** Realization of WLAN wireless access within small and medium enterprises



# FiberHome VS Other Vendor

## — 8-port L2 FE PoE Switch

Type Spec.	FiberHome S2208ME-PAF	Micronet SP6510P8	Cisco ESW- 520-8P-K9	HP E2520-8- PoE Switch
IEEE802.3at (30W)	Support	—	—	—
PoE power	124W	32W	33.12W	67W
The priority of PoE port configurable	Support	—	—	—
MAC address table size	16K	1K	8k	8K
Throughput	4.17Mpps	1.19Mpps	1.2Mpps	4.1Mpps
Operating temperature	-5~55°C	0~40°C	0~40°C	0~45°C
Storage temperature	-20~85°C	-10~70°C	-20~70°C	-40~70°C
Anti-lightning	6KV	—	—	—