



**OCP**  
SUMMIT

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**OPEN. FOR BUSINESS.**



# Open, Efficient & Intelligent: Smart Infrastructure Solutions



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ICT Infrastructure BG  
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**OPEN. FOR BUSINESS.**



# Serving Customers in 104 countries

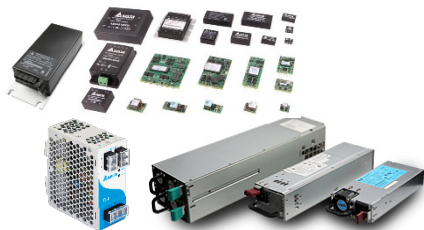


## Products

### Infrastructure



### Power Electronics



### Automation



## Solutions

### Data Center



### Telecom Power



### Industrial Automation



### Building Automation



### Renewable Energy



	Asia-Pacific (China)	Americas	EMEA	Total
Sales Offices	104 (61)	20	39	163
Plant Sites	32 (19)	4	3	39
R&D Centers	43 (23)	9	12	64

# Open – Efficient – Intelligent: Infrastructure



Efficient - Intelligent

Open

Managed



Distribution & Management



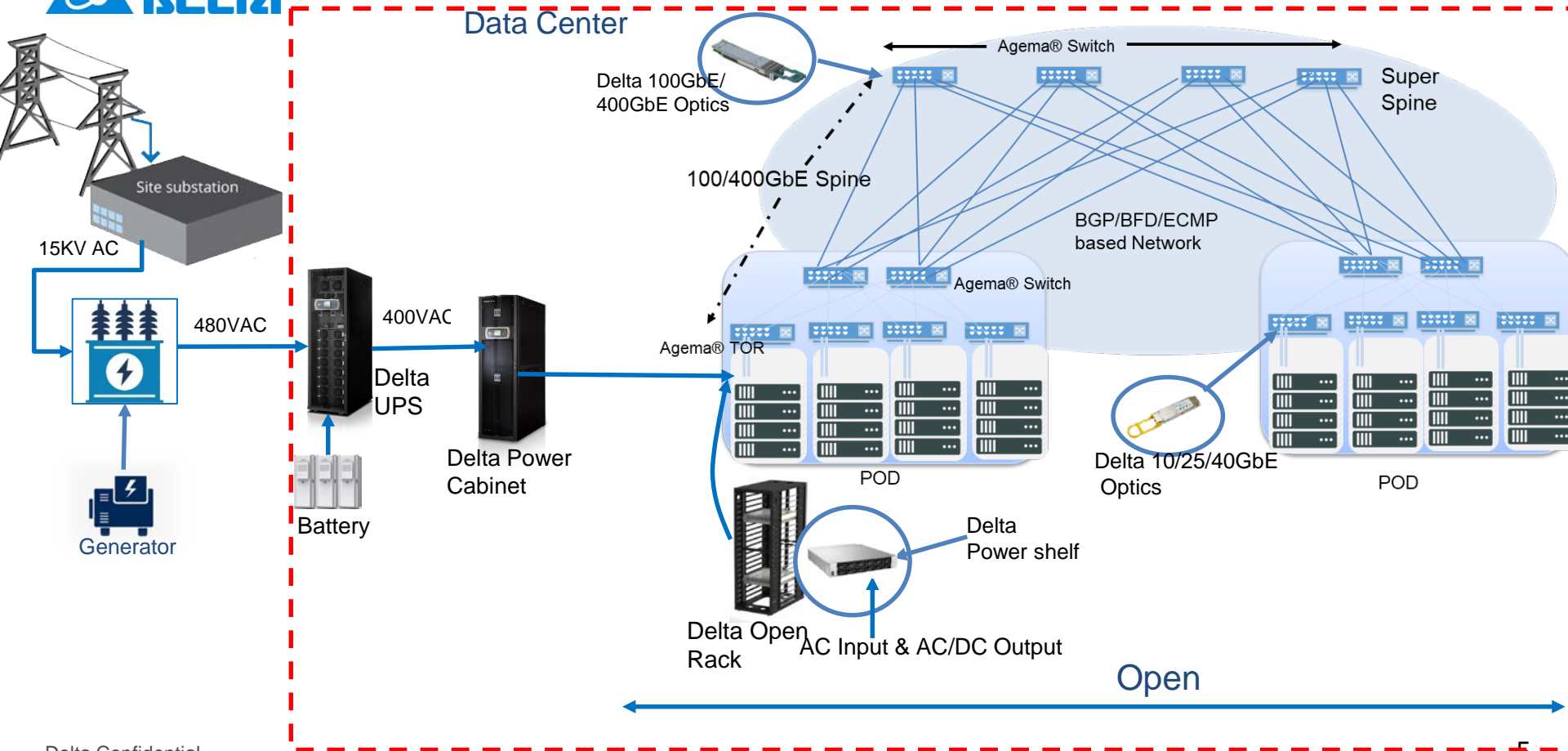
Rack & Accessories



Networks

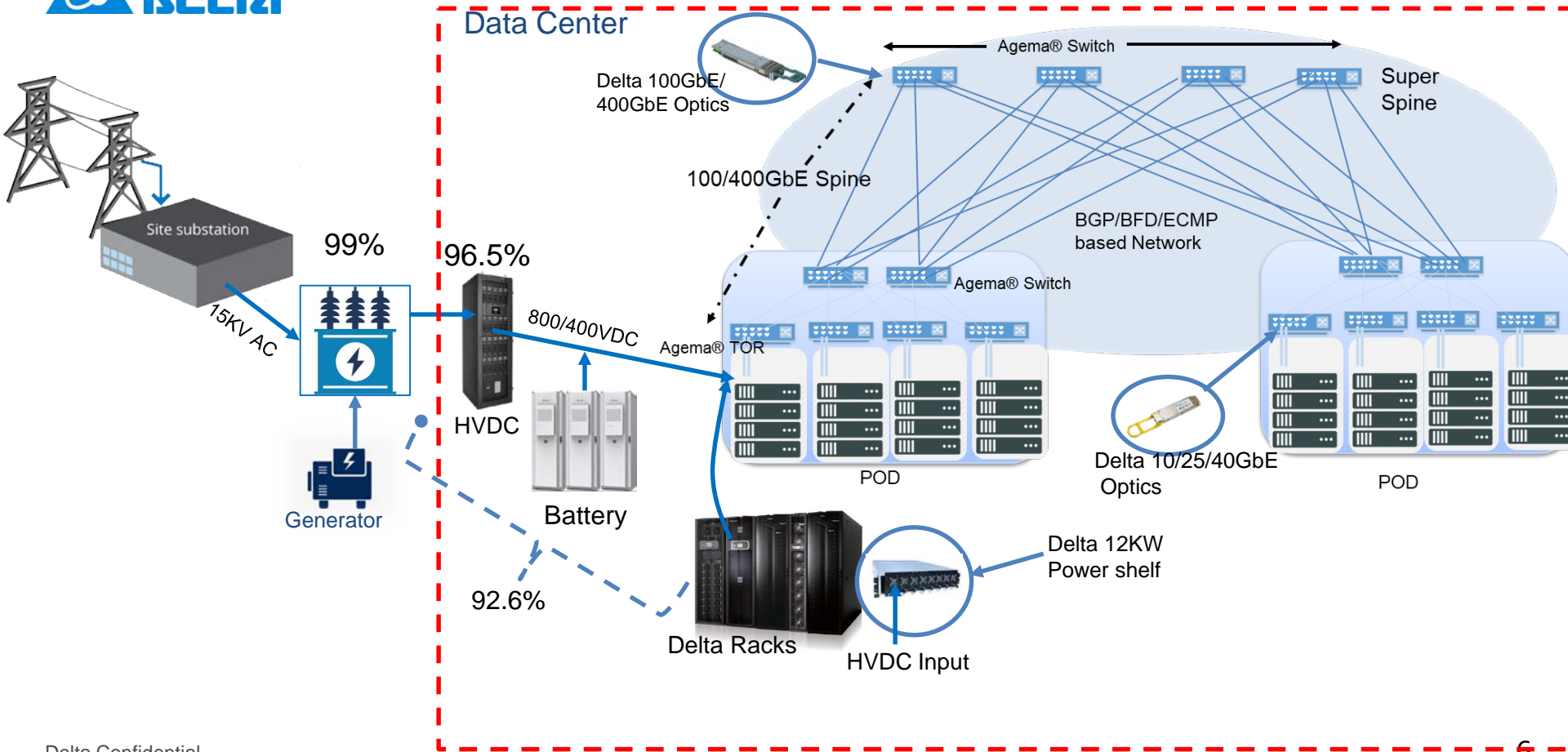
Choice of Extensible Cloud Service	XOS	OpenCloud
Choice of SDN Orchestration	EUCALYPTUS	openstack, cloudstack, OpenNebula
Choice of Controller	OPEN DAYLIGHT, ONOS	ForCES, Third Party
Choice of Network Hypervisor	Flowvisor, OpenVirtEX	OPENCONTRAIL
Choice of NOS	Microsoft SONIC, ubuntu, Open Switch, ONL	FICA, ipinfusion, Broadcom® ICOS™, ForCES
Hardware Abstraction	OpenNSL, SAI	OFDPA, FBOS Agent, BigSwitch, Switch Light OS

# Delivering on "Open" promise: Conventional Approach

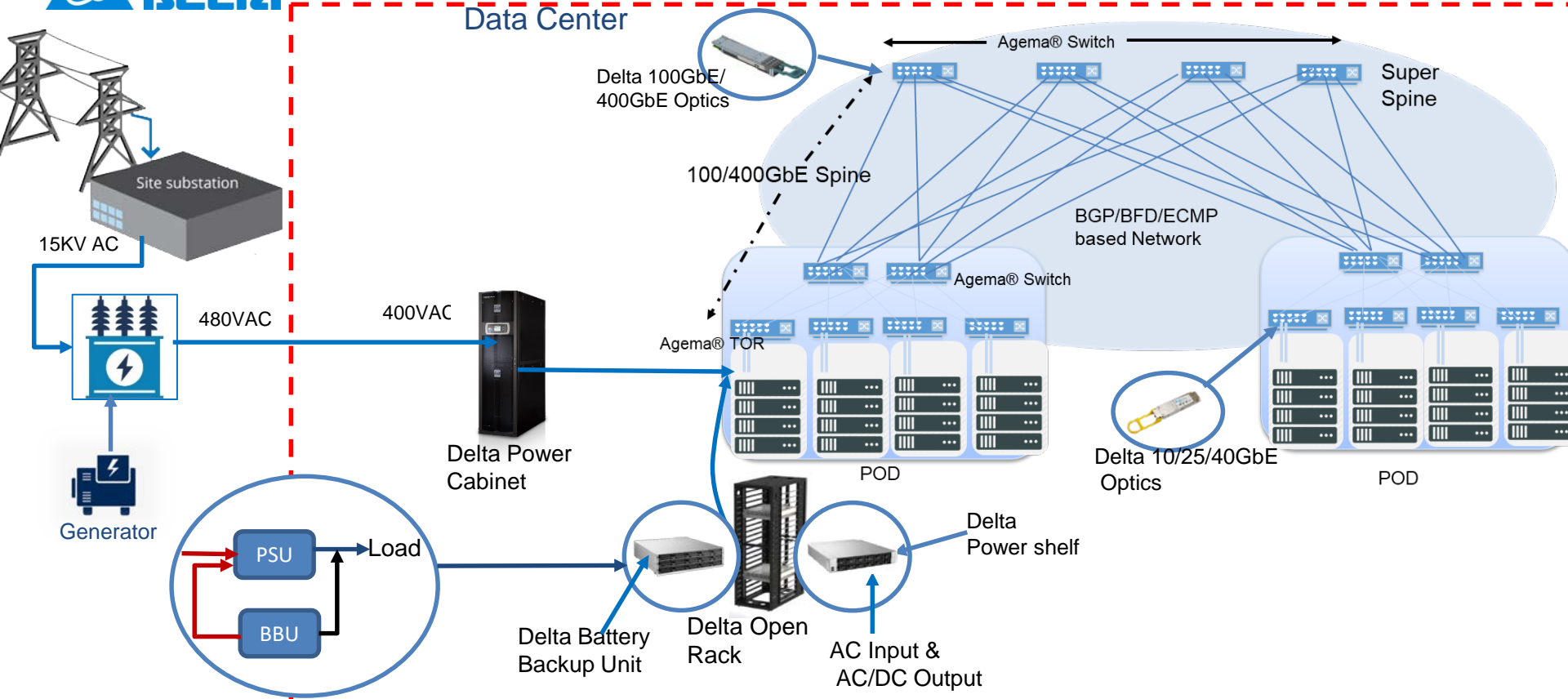




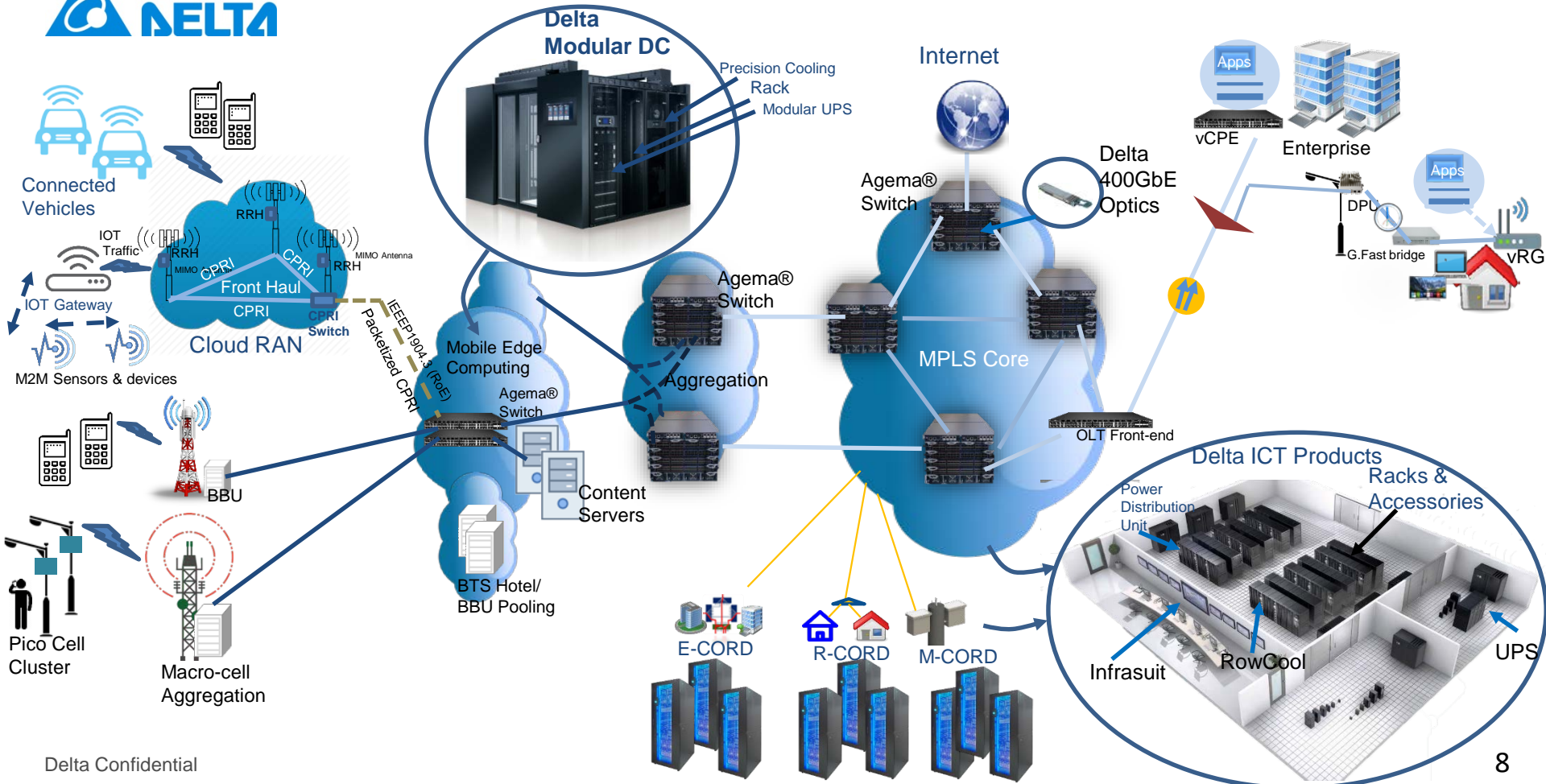
# Delivering on "Efficiency" promise: HVDC Approach



# Delivering on "Efficiency" promise: Offline backup Approach



# Delivering on "Open – Intelligent" promise: Telecom Networks







# Delivering on “Open” Promise: Open Rack Portfolio



Single AC I/P  
V1 open rack  
12.5V/ 12.5KW



Dual AC Input  
V1 open rack  
12.5V/ 14KW



Dual AC Input  
V1 open rack  
12.5V/ 28KW



Dual AC Input  
V1 open rack  
12.5V/ 15KW



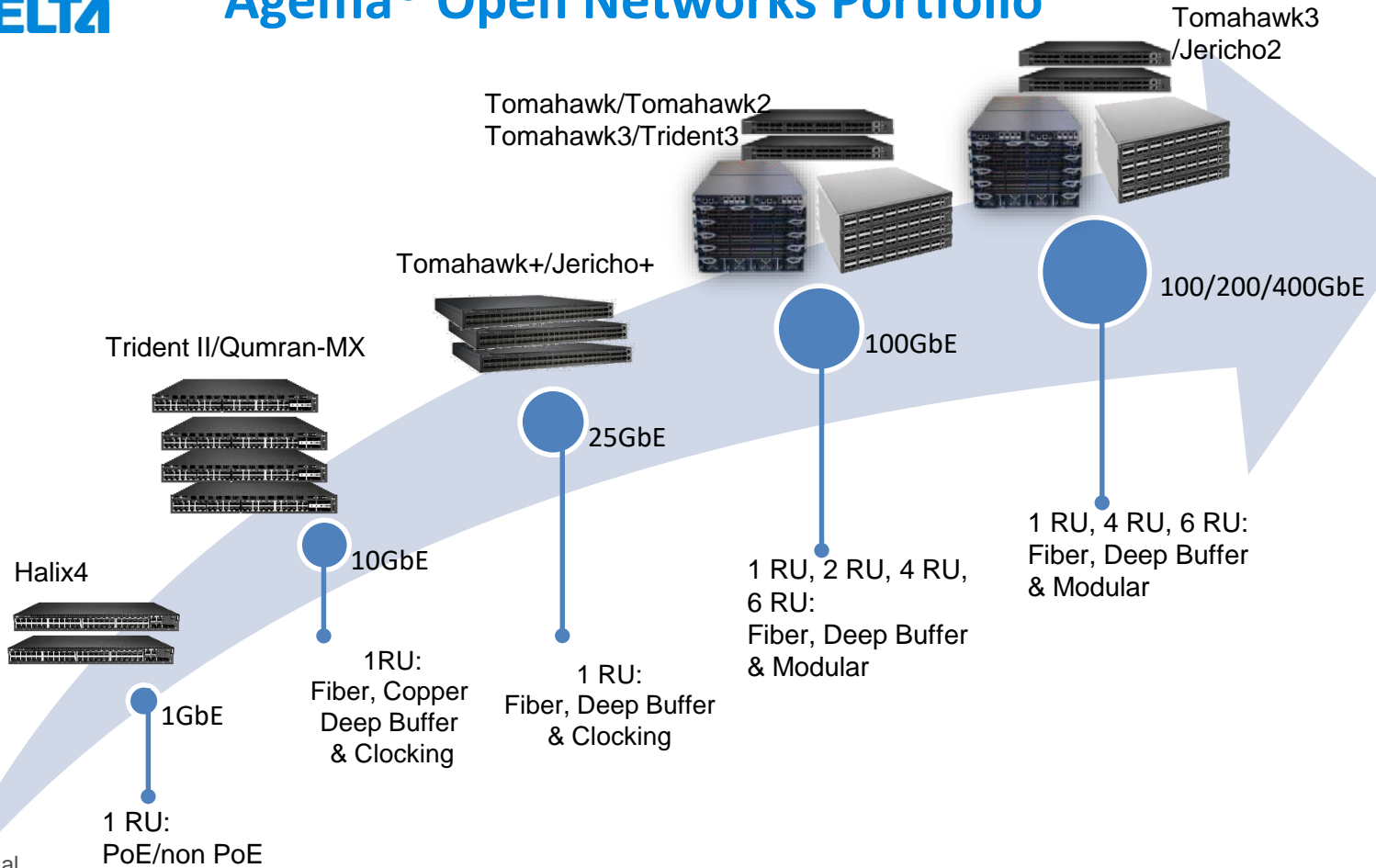
Dual AC I/P  
V2 open rack  
12.5V/ 12.5KW



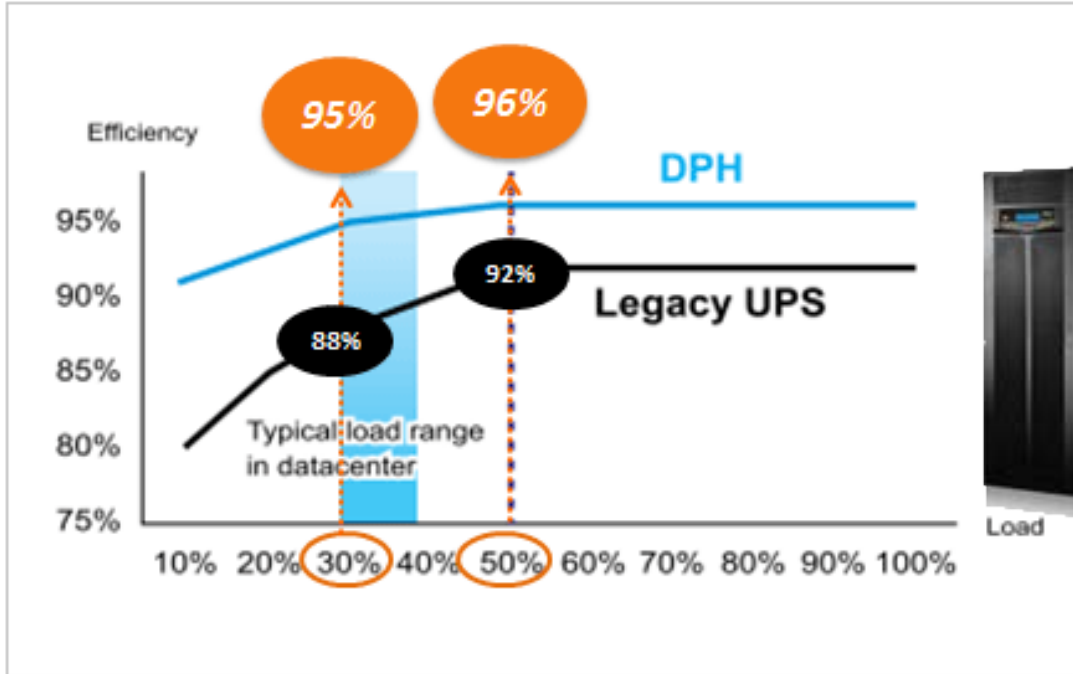
Single AC Input  
V2 open rack  
48V/ 33KW



# Delivering on "Open" Promise: Agema® Open Networks Portfolio



# Delivering on “Efficiency” Promise: UPS Portfolio



Delta UPS Portfolio



# Delivering on Efficiency Promise: Power Portfolio



AC / HVDC Inputs  
12.5V/ 12KW  
Power Shelf



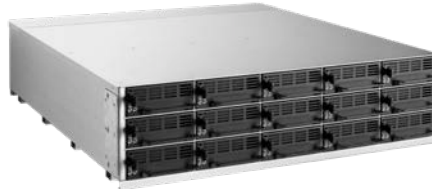
Three phase 30A ATS



Dual AC inputs  
12.5V/ 14KW  
Power Shelf



Single AC inputs  
48V/ 33KW Power Shelf



48V/ 33KW BBU



150KW HVDC  
Power Cabinet



# Delivering “Efficiency” promise: Precision Cooling portfolio



RowCool 29/43KW,  
Chilled Water



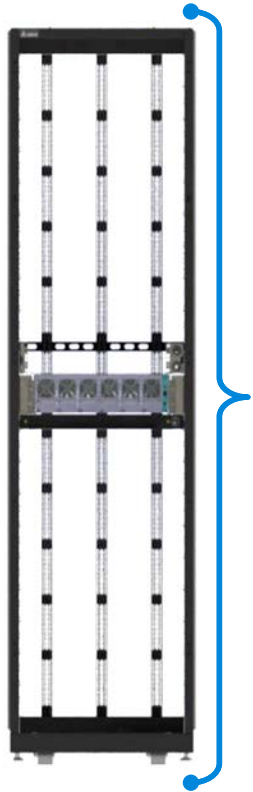
RowCool 70/95 kW,  
Chilled Water



RowCool 35kW,  
Air-Cooled



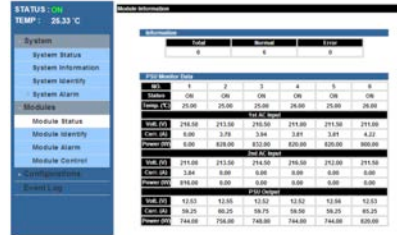
# Delivering on “Intelligent Device” promise: Smart Rack Management



AC line information, PSU status, output power, event log, etc.



Temp & Humidity Sensor, Smoke Sensor, Water Leak Sensor, Air Flow Sensor, etc.



Internet/Web Page

Name/OID	Value	Type
rncSiteName.0	Site Name	OctetString
rncSiteLocation.0	Site Location	OctetString
rncSystemName.0	System Name	OctetString
rncSystemLocation.0	System Location	OctetString
rncSystemDescription.0	System Description	OctetString
rncModelNum.0	MN_DEMO_06	OctetString
rncSerialNum.0	SN_DEMO_06	OctetString
rncFactoryDate.0	2013-12	OctetString
rncHardwareRev.0	HW 1.0 A	OctetString
rncSoftwareRev.0	rnc_X1.00B01	OctetString
rncReleaseNum.0	100	Integer
rncDate Time.0	2014-01-09 13:53:53	OctetString
rncTemperatureUnit.0	c (0)	Integer

SNMP/ MIB file



Real-time PUE & Power Usage

Rack Level

Data Center Level



# Delta Optics Product Portfolios



AOC

400G



400G QSFP-DD AOC  
(Sample Q2'18)  
· 400G OSFP-DD AOC  
(Sample Q2'18)

2x100G



2x100G QSFP-DD AOC

100G



100G QSFP28 AOC



100G QSFP28  
Fan out AOC

40G



40G QSFP+ AOC



40G Fan out AOC

25G



25G SFP28 AOC

Transceiver



400G QSFP-DD DR4  
(Sample Q4'18)  
· 400G OSFP  
DR4  
(Sample Q1'19)



400G QSFP-DD FR4  
(Sample Q4'18)  
· 400G OSFP FR4  
(Sample Q1'19)



2x100G QSFP-DD CWDM4  
(CS Connector)  
(Sample Q3'18)



2x100G QSFP-DD LR4  
(CS Connector)  
(Sample Q4'18)



100G QSFP28 LR4



100G QSFP28 LR4



100G QSFP28 SR4



100G QSFP28 DR / FR  
(Sample Q4'18)



100G QSFP28  
CWDM4



40G QSFP+ SR4



40G QSFP+ LR-Lite

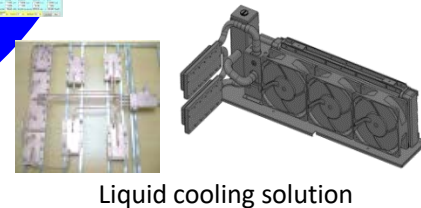
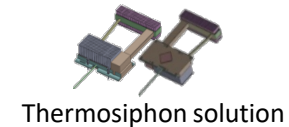
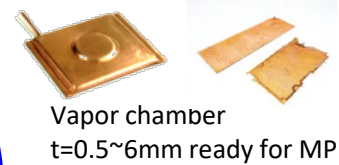
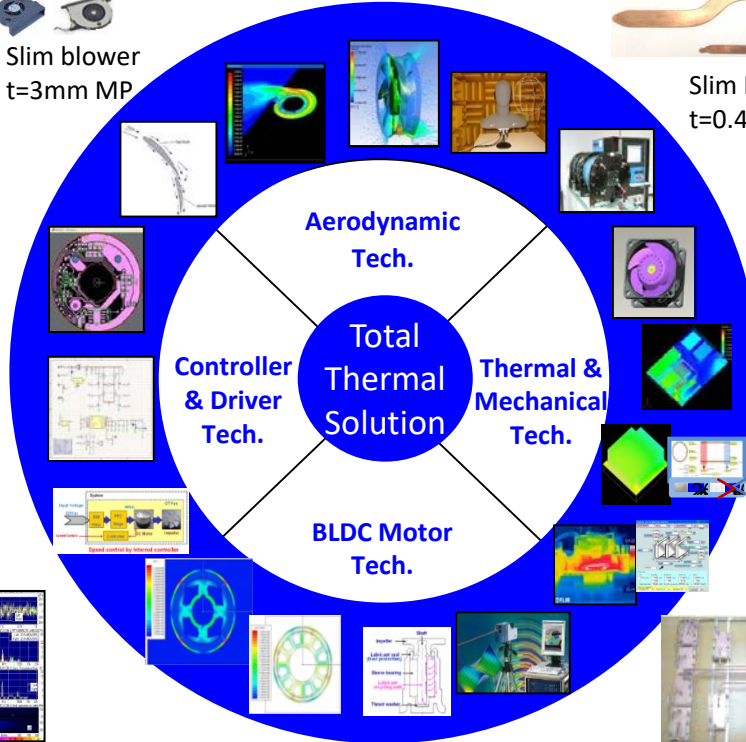
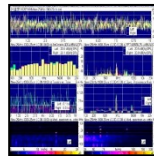
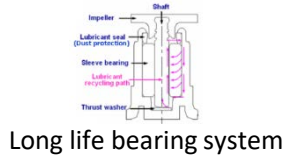
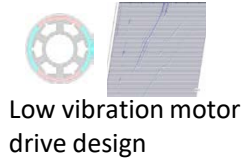


25G SFP28 SR



25G SFP28 LR

# Delta Accessories Product Portfolio





# Smarter. Greener. Together.

To learn more about Delta, please visit [www.deltaww.com](http://www.deltaww.com)  
or scan the QR code



English



Traditional  
Chinese



Simplified  
Chinese





# OPEN

Compute Project

