

# iAccess™

## Ethernet Aggregation Platform

### -FRM220A Series

IP Based Ethernet Aggregation Platform-FRM220A-CH20



The FRM220A series is a IP based Ethernet aggregation platform, which incorporates a 24+4 port L2 Gigabit Ethernet switch (FRM220A-GSW/SNMP) or a new 20+4 port L2 Gigabit Ethernet switch with 4x10Gigabit uplink (FRM220A-GSW/SNMP-10G). The FRM220A has a built-in Gigabit Ethernet backplane to interconnect the Ethernet access and E1 TDM based inverse multiplexer module cards with the FRM220-GSW/SNMP card. The L2 switch card supports many advanced Layer 2 switch technologies including port and tag based VLAN, QoS, LACP, RSTP to name just a few. The FRM220A chassis solution significantly lowers the OPEX for operator and service provider when deploying fiber access networks.

## Specifications

Connectors	Consoles RS232 (DB9)	
	LAN 10/100Base-TX RJ45	
Physical Specifications	Dimensions	303 x 438 x 88 mm (D x W x H)
	Weight (w/o Power)	5.2kg
Power	AC	18~240VAC
	DC24	18~36VDC
	DC48	36~72VDC

<b>Temperatures</b>	Operating 0~60°C
	Storage -10~70°C
<b>Humidity</b>	5%~90% non-condensing
<b>MTBF</b>	65,000 hrs
<b>Certification</b>	FCC Class A, VCCI Class A, CE, RoHS compliant

## FRM220A Module Cards

The product lists designed to be adequately to the FRM220A-CH20 Ethernet aggregation application such as Ethernet access, EDD and Ethernet over PDH are included.

### Ethernet Switch



#### FRM220A-1002ES

2x 10/100/1000Base-T + 2x100/1000Base-X  
Managed Switch ([refer to page 3-31](#))

#### FRM220A-1000EAS/X

2x 10/100/1000Base-T + 2x1000Base-X  
OAM/IP Managed Switch ([refer to page 3-32](#))

### EDD



#### FRM220-MSW202

2x GbE, RJ45 + 2x Dual Rate  
L2+ OAM Managed Switch  
([refer to page 3-27](#))

#### FRM220-MX210

2x 1G/2.5GbE SFP + 1x GbE RJ45  
OAM Managed Switch  
([refer to page 3-29](#))

### Inverse Mux



#### FRM220A-iMux Series

Ethernet over 4/8/16x E1 NTU  
([refer to page 3-44](#))

### Ethernet over E1 Converters



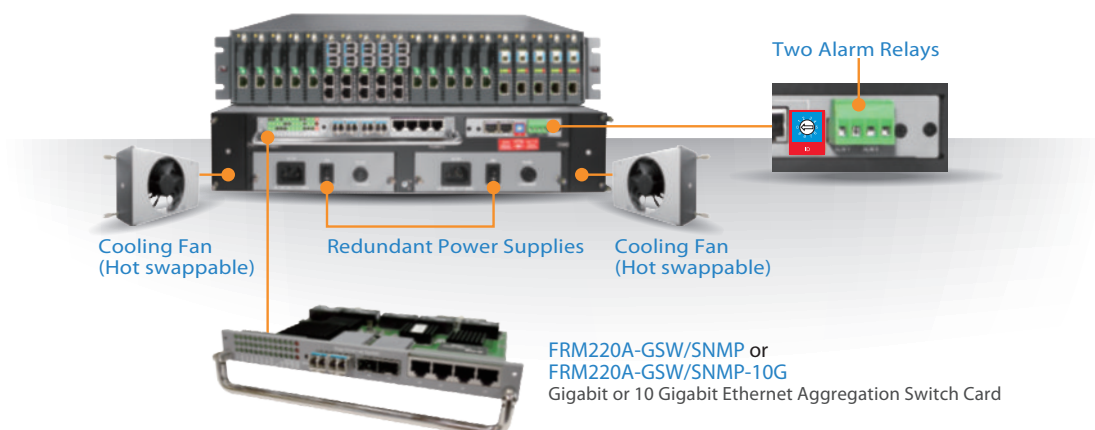
#### FRM220A-Eoe1/G(S)

Ethernet Bridge over E1 (GFP)  
([refer to page 3-52](#))

#### FRM220A-Eoe1

Ethernet Bridge over E1  
([refer to page 3-53](#))

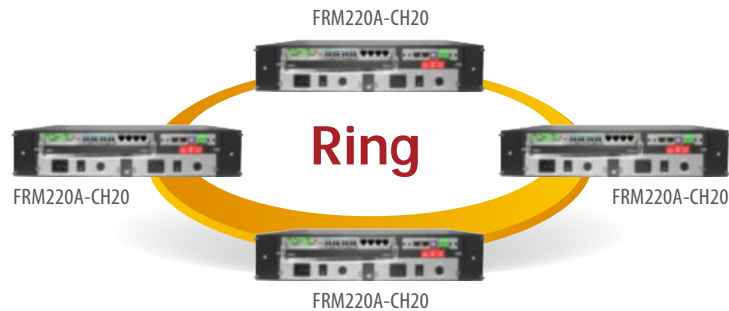
## Chassis Overview



## Benefit of FRM220A Chassis Platform

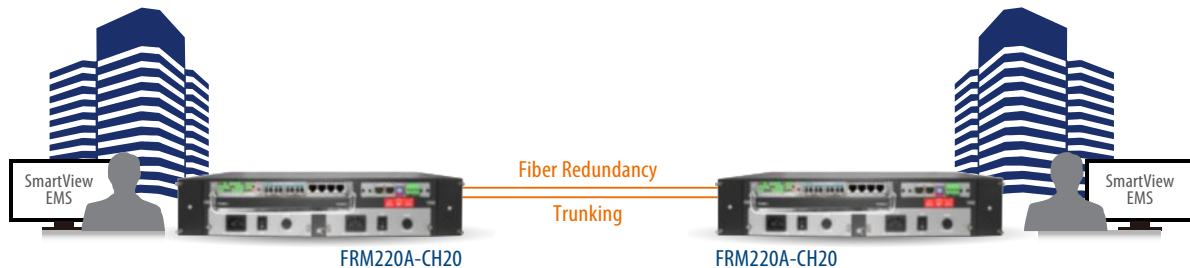
### ■ Enabling IP Transportation Protection Mechanism - STP/RSTP Featured Ring Protection

- Standard based but advanced fault protection systems
- Rapidly recovery path from failed connection (1-2 seconds min. recovery time)

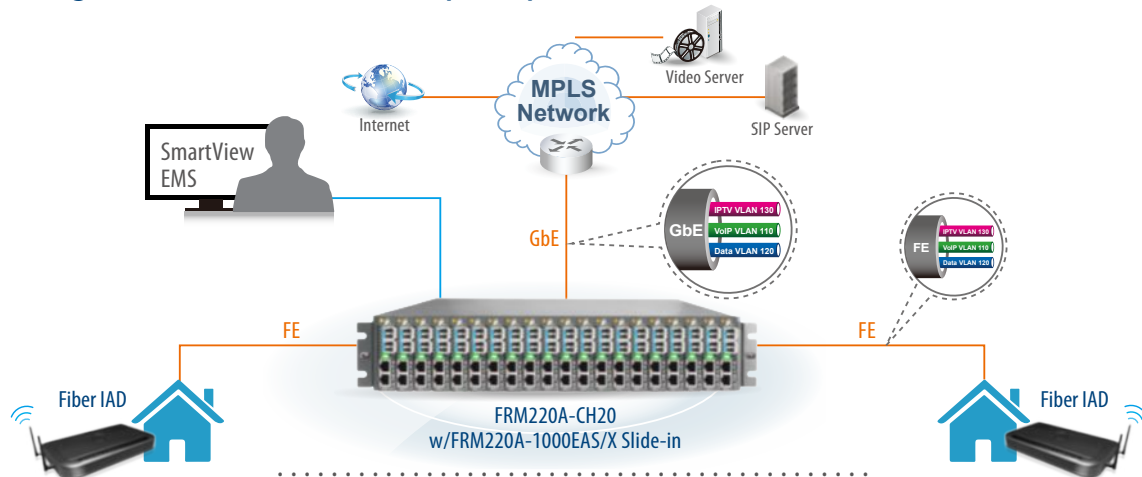


### ■ LACP Enabled Traffic Aggregation - Fiber Redundant / Trunking Application

- Dynamically port aggregation or trucking to increase bandwidth between LACP peer devices
- Redundant paths to reduce network fault risk



### ■ Enabling VLAN & QoS Prioritized Multiple Play Services



### ■ Secured Access Control Enhancement - Centralized Management of Accessing the Network for user or device

