



# FRM220A-GSW/SNMP-10G

10G uplink Ethernet Aggregation Switch Card

## FRM220A-GSW/SNMP(n)

1G uplink Ethernet Aggregation Switch Card

FRM220A-GSW/SNMP-10G/FRM220A-GSW/SNMP (n) are next generation switch/management trunk cards for the FRM220A chassis. Twenty (20) GbE switch ports supply each slot of the 2U 20-slot chassis with an electrical gigabit Ethernet uplink with a remaining four (4) electrical gigabit ports accessible via the rear of the chassis. The additional four uplink SFP ports provide 1G/10G Ethernet connections, also on the rear of the chassis. All rear facing eight (8) ports (4x GE+ 4x 1G/10G or 4x GE + 4x 1G) are usable without restrictions for uplink aggregation to the Ethernet Metropolitan Area Network (E-MAN). The FRM220A-GSW/SNMP trunk card transmits Ethernet between the subscriber equipment (bridge/modem or network interface card) and the E-MAN. The trunk card also provides a management interface with Ethernet packets via Telnet, SSHv2, http/https and SNMP (v1,v2c,v3).

#### **Features**

- Provides chassis aggregation via 4x 1G/10Gigabit Base-X SFP/ SFP+ uplink slots (FRM220A-GSW/SNMP-10)
- Provides chassis aggregation via 4x 1G Gigabit Base-X SFP uplink slots (FRM220A-GSW/SNMP(n))
- Supports IEEE 802.1p HW based 8 priority queues and L2~L4 QoS functions
- Supports IPv6 management
- Fiber optical ports supports Ring topology

- Built-in gigabit Ethernet interface to link with each slot of FRM220A chassis
- Provides Web (https), Telnet, SSHv2, SNMP(V1, V2c, V3) management interface
- Supports IEEE 802.1D/802.1w/802.1s for ring protection on the trunk interfaces
- Supports IEEE 802.1Q tagged VLAN and IEEE 802.1ad Q-in-Q application

## **Specifications**

Trunk Interface	4x 1G Base-X SFP + $4$ x 10/100/1000Base-T RJ45 switch trunk card	
	Supports full-duplex mode for 1G/10G Mbps (FRM220A-GSW/SNMP-10G)	
	Supports full-duplex mode for 1G Mbps (FRM220A-GSW/SNMP(n))	
Capacity	Supports up to 20 service cards	
Temperature	0~60°C (Operating), -10~70°C (Storage)	
Humidity	5~90% non-condensing	
Certification	CE, FCC, RoHS compliant	

Management Specifications	In-band management	Provides all system OAM functions: software updates, and management system interaction through Ethernet trunk port	
	Out-band management	Supports Web, Telnet and SNMP, SSHv2 EMS management	
Indications	PWR, FAN, Alarm, STK		
Dimensions	142 x 200 x 26 r	nm (D x W x H)	
Weight	0.5kg		
MTBF	65,000 hrs		

## **Ordering Information**

Model Name	Туре	Description
FRM220A-CH20	Chassis	2U 20-Slot rack mount chassis with 20 line console blank plate
FRM220A-GSW/SNMP-10G	Card	10G Ethernet Aggregate switch card supports web, telnet, SNMP management interface
FRM220A-GSW/SNMP(n)	Card	1G Ethernet Aggregate switch card supports web, telnet, SNMP management interface
FRM220A-AC	Power	Chassis power module 100 ~ 240 VAC, IEC connector
FRM220A-DC24	Power	Chassis power module 18 ~ 36 VDC, 3 pin terminal block
FRM220A-DC48	Power	Chassis power module $36 \sim 72$ VDC, $3$ pin terminal block

FRM220A – Chassis
Example: FRM220A – CH20

FRM220A – GSW/SNMP-10G