



FRM220A-GSW/SNMP-10G

10G uplink Ethernet Aggregation Switch Card

FRM220A-GSW/SNMP-1G

1G uplink Ethernet Aggregation Switch Card

FRM220A-GSW/SNMP-10G and 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 (4 × GE+ 4 × 1G/10G or 4 × GE + 4 × 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 4 × 1G/10Gigabit Base-R SFP/SFP+ uplink slots (FRM220A-GSW/SNMP-10G)
- Provides chassis aggregation via 4 × 1G Gigabit Base-X SFP uplink slots (FRM220A-GSW/SNMP-1G)
- 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	4 × 1G Base-X SFP + 4 × 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-1G)	
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 × 200 × 26 mm (D×W×H)	
Weight	0.5kg	
MTBF	65,000 hrs	

// Ordering Information

Model Name	Type	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-1G	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 ~ 60 VDC, 3 pin terminal block