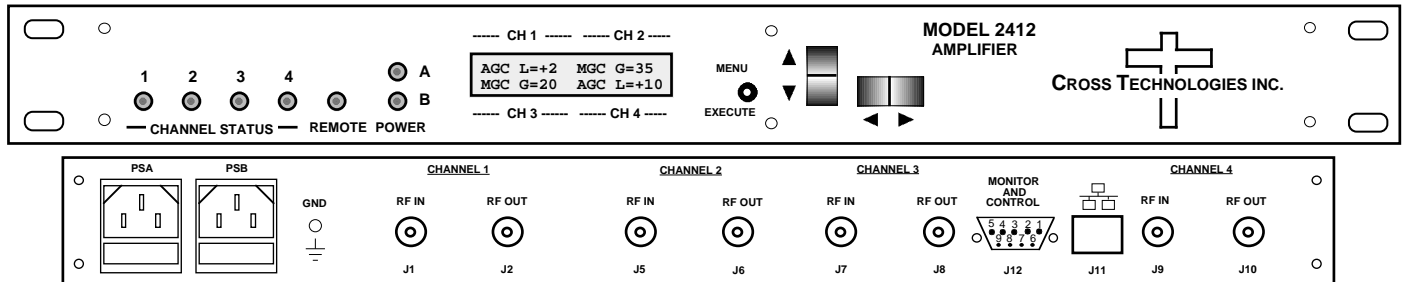


## 2412-408 IF AGC Amplifier, Four Channel

**2412-308 Three Channel    2412-208 Two Channel    2412-108 One Channel**

The 2412-408 IF AGC Amplifier has four individual channels, each one provides automatic gain control (AGC) or manual gain control (MGC) for a 50-200 MHz IF signal. It takes a -35 to 0 dBm input signal and automatically adjusts the gain for a 0 to +10 dBm ( $\pm 1$  dB) output which can be adjusted using the front panel multi-function switches. Front panel LEDs provide indication of DC power, PLL alarm or Remote operation. Each channel has a band limiting lowpass filter. Each channel gain can also be adjustable manually (MGC) over a 0 to +45 dB range using the front panel multi-function switches. AGC/MGC, output level (in AGC) and gain (in MGC) of each channel are remotely selectable. Parameter selection and output level (in AGC) and gain (in MGC) settings appear on the LCD display. Connectors are BNC female for the IF input and output signals. The table below shows other options. The 2412-408 is powered by a 100-240  $\pm 10\%$  VAC, 47-63 Hz power supply, and is contained in a 1 3/4" X 19" X 16" rack mount chassis.



**Front and Rear Panels (2412-408 Four Channel shown)**

### EQUIPMENT SPECIFICATIONS\*

#### Input Characteristics

|                    |                            |
|--------------------|----------------------------|
| Impedance          | 50 $\Omega$ or 75 $\Omega$ |
| Return Loss        | 14 dB                      |
| Frequency          | 50 to 200 MHz              |
| Noise Figure, Max. | 15 dB max gain             |
| Input Level range  | -35 to 0 dBm               |

#### Output Characteristics

|                         |                            |
|-------------------------|----------------------------|
| Impedance               | 50 $\Omega$ or 75 $\Omega$ |
| Return Loss             | 14 dB                      |
| Output Level range      | 0 to +10 dBm               |
| Output 1 dB compression | +15 dBm                    |

#### Channel Characteristics

|                         |   |
|-------------------------|---|
| Gain range (adjustable) | 0.0 to +45 dB (AGC)   |
| Frequency Response      | $\pm 1.0$ dB, 50 to 200 MHz ; $\pm 0.5$ dB, $\pm 20$ MHz BW |
| Group Delay, max        | $\pm 2$ ns, 50 to 200 MHz                                   |

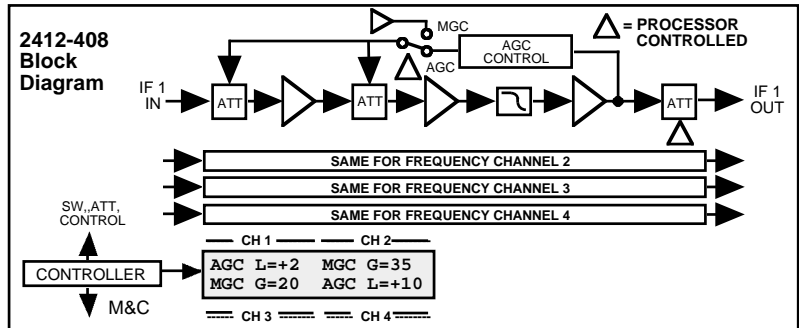
#### Controls, Indicators

|                       |   |
|-----------------------|---|
| <b>AGC/MGC Switch</b> | <b>Direct readout LCD; manual or remote selection</b>                                   |
| <b>Level Adjust</b>   | <b>Direct readout LCD; manual or remote selection; adjusts output level in AGC mode</b> |
| <b>MGC Adjust</b>     | <b>Direct readout LCD; manual or remote selection; adjusts manual gain in MGC mode</b>  |

|                      |  |
|----------------------|--|
| Power; Alarm; Remote | Green LED; Red LED; Yellow LED                                     |
| <b>Remote</b>        | <b>RS232C/RS485 selectable, (Ethernet, option W8, W18, or W28)</b> |

#### Other

|                        |  |
|------------------------|--|
| IF Connectors          | 50 $\Omega$ BNC (female), Works for 50 $\Omega$ or 75 $\Omega$ |
| Alarm/Remote Connector | DB9 (female) - NO or NC contact closure on Alarm               |
| Size                   | 19 inch, 1RU standard chassis 1.75" high X 16.0" deep          |
| Power                  | 100-240 $\pm 10\%$ VAC, 47-63 Hz, 45 watts max                 |



#### 3, 2, 1 Channel Model Numbers

2412-308 - 3 CHANNELS  
2412-208 - 2 CHANNELS  
2412-108 - 1 CHANNEL

#### Available Options

R- Redundant Power Supply  
W8 - Ethernet; w/Web Browser (WB)  
W18 - Ethernet; w/WB & SNMP  
W28 - Ethernet; w/TCP/IP, Telnet

10°C to 40°C; Specifications subject to change without notice

