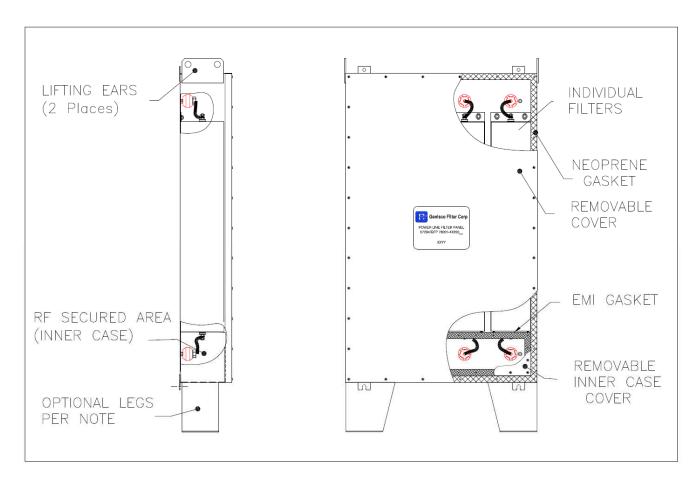




**GFP78221 Capacitive Input Low Leakage General Performance** 100 dB from 150 kHz ~ 18 GHz



# **Product Summary**

EMI/RFI Facility Power Line Filters are used to block unwanted signals and remove interference from entering or exiting through the power lines. Our GFP78221 Series Filter Panels have an insertion loss (Attenuation) of 100 dB from 150 kHz. to 18GHz.

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### **FUNCTIONAL CHARACTERISTICS**

- Voltage Ratings:
  - o 24-1,000 VDC
  - o 120/208 VAC (50/60 Hz)
  - o 277/480 VAC (50/60 Hz)
- Voltage Drop:
  - o 2% maximum at full rated unity power factor load.
- Harmonic Distortion:
  - o 4% maximum at full rated unity power factor load
- Temperature Rating:
  - o MIL-PRF-15733
- Current Overload:
  - 140% maximum current rating
- RF Radiation:
  - o Greater than 100 dB isolation
- Dielectric With-Standing Voltage:
  - o 2,200 VDC (prior to installation of discharge resistors)
- Insulation Resistance:
  - o MIL-PRF-15733 (prior to installation of discharge resistors)
  - Insertion loss:
  - o 100 dB @ 150 kHz to 18 GHz
  - o 50/50 Ohm System

# 100dB @ 150kHz. LOW LEAKAGE FILTERS

| FILTER RATED<br>AMPERAGE | 120VAC.          | 277VAC.          |
|--------------------------|------------------|------------------|
|                          | Leakage Current* | Leakage Current* |
| 15/30 AMP.               | 0.361 AMP.       | 0.835 AMP.       |
| 60/100 AMP.              | 0.588 AMP        | 1.357 AMP.       |
| 150 AMP.                 | 0.859 AMP.       | 1.984 AMP.       |
| 200 AMP.                 | 0.950 AMP.       | 2.192 AMP.       |
| 250 AMP.                 | 1.040 AMP        | 2.401 AMP.       |
| 300 AMP.                 | 1.040 AMP        | 2.401 AMP.       |
| 400 AMP                  | 1.040 AMP.       | 2.401 AMP.       |

<sup>\*</sup>Leakage current is approximate, based on frequency, voltage, and component variability.

Note: Filters are not designed or intended for short circuit, and are not provided with integral overcurrent protection, or any overcurrent protection. Intended to be installed with suitably rated overcurrent protection upstream to prevent all short-circuit scenarios from occurring. When a filter is installed downstream of an approved overcurrent protection device (Such as a circuit breaker) there is no need for the filter to have an SCCR rating itself, since the upstream protection device will provide protection to the filter.





#### SPECIAL FEATURES

#### **Filters**

- Low Pass filter circuits ~ passive components which includes inductors, capacitors, resistors and optional transient suppression devices
- Manufactured and tested per applicable portions of MIL-PRF-15733
- Filter cases 16 gage, CRS, plated or painted finish
- Sealed with welded and soldered seams for shielding effectiveness
- Discharge resistors incorporated to eliminate potential shock hazard

#### **Enclosure**

- Modified NEMA type fabricated panel of not less than 14 gauge cold rolled steel painted Gray (Std. Paint Color)
- RF tight inner area secured with RF gasket for a minimum 100 dB shielding effectiveness, @ 14 kHz to 18 GHz
- Pre-wired standoffs and cable lugs
- Lifting ears included
- · Front cover access to filters and terminal standoffs
- Floor or wall mount options

# **Applicable Specifications**

- Military Specifications: MIL-PRF-15733 General
- Military Test Methods
  - o MIL-STD-202 Component Parts
  - o MIL-STD-220 Insertion Loss
  - o MIL-STD-285 Shielding Effectiveness
- NFPA 70/2011 National Electrical Code Standards

# **Available Options**

- EMP Shield Surge Suppressors
- Legs

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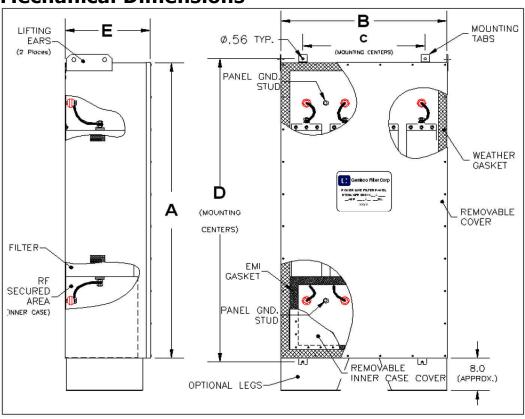






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# **Mechanical Dimensions**



**Table 1 Mechanical Dimensions (listed in inches)** 

| Quantity of Filters<br>and Current Rating* | A                                     | В  | С   | D        | E    | Approx<br>Weight<br>(lbs) |
|--|---------------------------------------|----|-----|----------|------|---------------------------|
| 4x30 Amp                                   | 34                                    | 23 | 17  | 35.25    | 8.25 | 225                       |
| 4x60 Amp                                   | 34                                    | 23 | 17  | 35.25    | 8.25 | 240                       |
| 4x100 Amp                                  | 34                                    | 23 | 17  | 35.25    | 8.25 | 250                       |
| 4x150 Amp                                  | 51                                    | 30 | 24  | 52.3     | 10   | 400                       |
| 4x200 Amp                                  | 51                                    | 30 | 24  | 52.3     | 10   | 450                       |
| 4x250 Amp                                  | 51                                    | 30 | 24  | 52.3     | 10   | 450                       |
| 4x300 Amp                                  | 80" overall<br>**(72" case + 8" legs) | 39 | N/A | Side tab | 14   | 900                       |
| 4x400 Amp                                  | 80" overall<br>**(72" case + 8" legs) | 39 | N/A | Side tab | 14   | 900                       |
|  |                                       |    |     |          |      |                           |

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# PART NUMBER BREAKDOWN, USING A **GFP78221-4X100-00** AS THE EXAMPLE:

- GFP78221 = FILTER PANEL SERIES
- <u>-4x100</u> = Number of individual filter elements installed within the filter enclosure. This is followed by the amperage rating. In this example there are four filter elements each rated for 100 amps.
- <u>-00</u>. The last one or two characters denote options or special manufacturing notes.

Please contact us for specific model information and pricing or with any questions you may have.

sales@appliedpowergroup.com

703-761-4110

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