

ACTIV 10G-HW Ethernet Electromagnetic Interference (EMI) Filter



The ACTIV 10G-HW electromagnetic interference (EMI) Filter is the most advanced and effective EMI filter for Ethernet available on the market. The filter is designed to pass Ethernet speeds from 10 Megabits to 10 Gigabits and all standards in between. Invisible to connected network devices, the ACTIV 10G-HW will auto-negotiate to the fastest data rate supported by both end points. Utilizing proprietary Digital Signal Processing (DSP) techniques, the ACTIV 10G-HW faithfully reproduces the Ethernet signals without unwanted or extraneous interference. The filter rejects unwanted signals from 10kHz to 40GHz at better than 100dB. Military grade passive filtering technology ensures that Ethernet packets traverse the filter in complete and absolute isolation from each other and the outside world. Signal lines are balanced perfectly throughout the multilayered cards to avoid disturbing the fast rise times required by digital square wave signals. The result is a pristine digital output far surpassing the filtering capabilities of any other EMI filters.

Each ACTIV 10G-HW Filter is constructed with the highest quality electrical components, starting with a super accurate, ultra stable high speed crystal chipset. To protect against unanticipated voltage and/or current surges, the filter incorporates ESD and transient voltage suppressors, inrush current limiters, and gas discharge tubes. ACTIV 10G-HW EMI Filters are mounted in a rugged protective housing machined from solid aluminum stock. The housing not only provides physical protection to the filter components, but is also an integral contributor to the filter's effectiveness. The unique structure of the housing effectively disrupts undesirable emissions from propagating through the filter while simultaneously providing low impedance pathways for interference to be directed out of the filter. Between the housing and protection circuitry, the ACTIV 10G-HW EMI Filter is suitable for nearly any environment ranging from climate-controlled commercial use to harsh and unforgiving military applications.

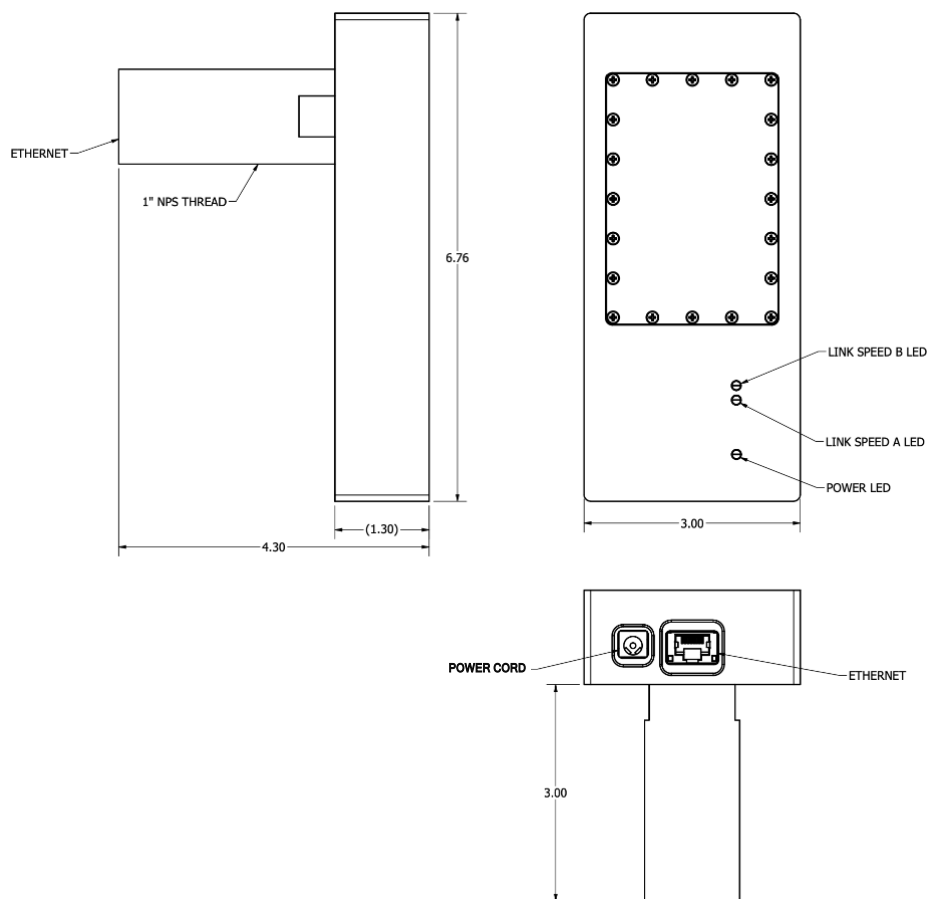
The ACTIV 10G-HW is the "Hard Wired" variant of the ACTIV 10G EMI filters. HW filters can be hard wired directly to the building power and do not require an electrical outlet near the EMI Filter. HW filters can be mounted above dropped ceilings and comply with most plenum-rated requirements.

Features:

- Proprietary DSP technology provides unmatched EMI filtering
- Military grade passive filtering techniques maintain clean and sharp signals
- Highest quality electrical components deliver long service life
- Rugged protective housing insures reliability in any environment

The ACTIV 10G-HW EMI Filter
The critical choice when blocking EMI is paramount.

Drawing



Connector Pinout

Pin	Ethernet (T568B)	
	Name	Description
1	BI_DA+	Bi-directional pair A +
2	BI_DA-	Bi-directional pair A -
3	BI_DB+	Bi-directional pair B +
4	BI_DC+	Bi-directional pair C +
5	BI_DC-	Bi-directional pair C -
6	BI_DB-	Bi-directional pair B -
7	BI_DD+	Bi-directional pair D +
8	BI_DD-	Bi-directional pair D -