



MATERIAL SPECIFICATION

- Corner die casting - Aluminum 380 alloy.
- Extrusions - Aluminum 6063-T5 alloy.

The F-Series is based on a modular extrusion frame design available in 3 versions. The F4 is a basic cabinet without gasketing. For applications requiring only dust and moisture control ; F6 is the appropriate choice. When the environment calls for both particle and EMC suppression, the F5 must be used. All versions feature an aluminum frame with integrated gasketing, corner castings, heavy duty door stiffening frame, multi-point locking system, windstops, and key locking door. With the choice of frame size, mounting rails, base, top/bottom , side panel, doors, color and accessories the cabinet can be built with any desired features and appearance.

### Features:

- Modular extruded, aluminum frame (6063-T5 Al)
- Corner die casting (380 AL)
- NEMA 12 gasket: EPDM (Ethylene-Propylene-Diene)
- EMC gasket overlay: Two layers of double-knit, tin-plated, copper-clad, steel mesh
- Multi-point locking system (2 x 21"-42", 4 x 52"-77")
- Standard Sizes: (custom available on request)
  - o Widths: 19", 23" and 24"
  - o Heights: 12U, 16U, 20U, 24U, 30U, 35U, 40U, 44U
  - o Depths: 24", 30", 36"
- Independent, removable side, top panel, bottom panel and doors
- Concealed hinges with 112 degree swing (external 210 degree hinge optional)
- Key lock door standard
- Flammability rating: UL94, Fireproof version (F8)
- Integrated cable management, power conditioning and cooling options
- Outdoor cabinets available upon request

### Benefits:

- Tested to meet harsh environment protection: NEMA 12/UL508, EMC FCC Class A, MIL STDs, CISPR
- Three levels of protection: F4 (No-gasket), F5 (NEMA), F6 (EMC/NEMA)
- 51dB shielding effectiveness, 30 to 1,000MHz
- Wide range of industry standard sizes and options
- Modular design reduces installation, upgrade and service time
- Custom design options with a standard platform and cost
- Selection of contemporary color choices, (custom color matching also available)
- Free assembly. Optima Stantron expertly assembles your cabinet at no charge
- Tested performance to: UL, CSA, FCC, MIL-STD, and CISPR

## Applications and Related Products

Optima Stantron's F-Series cabinets can be used in a wide range of applications.

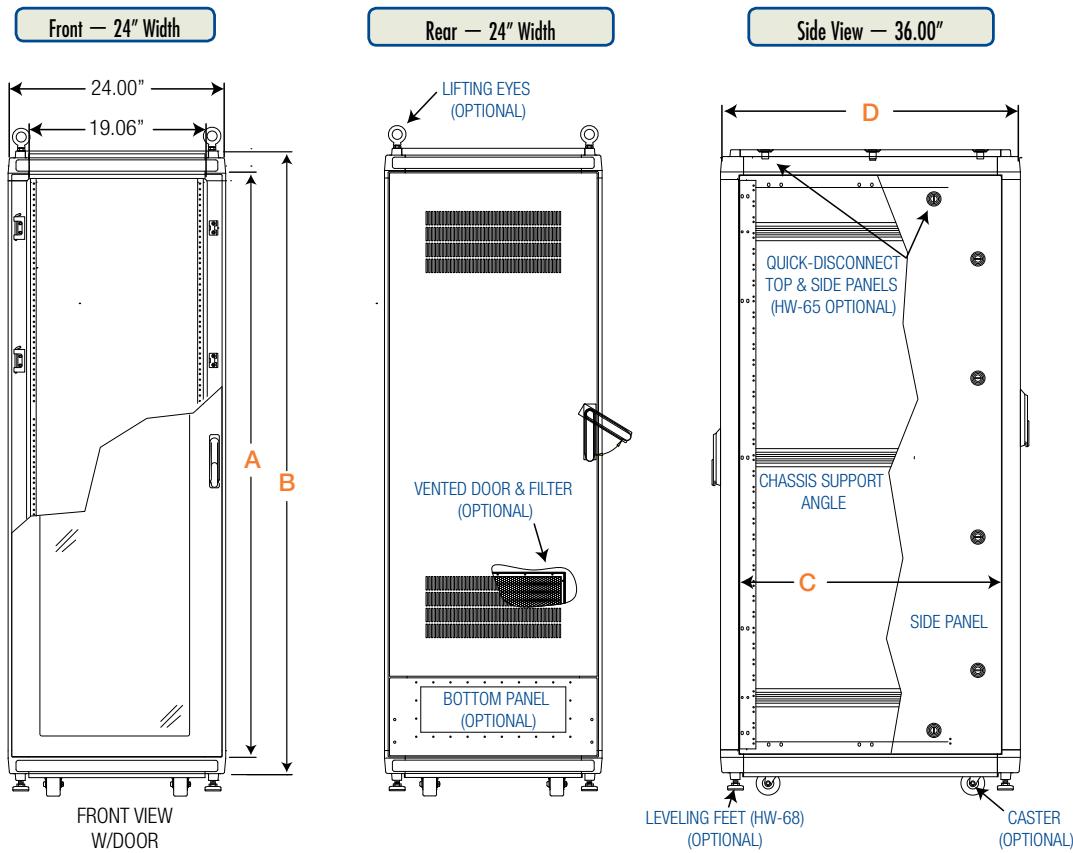
- Outdoor, NEMA 4, NEMA 12 type
- Fire protection
- For harsh environments including; temperature, dust, liquid,
- Particle and EMC suppression



# F-Series

## Harsh Environment, NEMA, Fire Cabinets

### Block Diagram



#### F5 FRAME GASKET, SHIELDED EMC / NEMA

- Gasket Material: Two layers of double-knit, tin-plated, copper-clad, steel or fabric mesh mounted to NEMA 12/UL 508 gasket.
- Dynamic mechanical properties yield a high deflection range and eliminate compression set.
- Excellent electrical conductivity.



#### F6 FRAME GASKET, NEMA 12 / UL508

- Material: EPDM (Ethylene-Propylene-Diene).
- Resistant to: UV, Ozone, weathering, seawater, compression set and abrasion.
- Temperature Range: -40 to 120 Deg C.
- Successfully tested to UL 508.



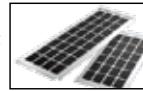
#### EMI/RFI FILTER VERSION

- Plenum spot-welded to door.
- 16 Ga.CRS, perforated.
- 187" diameter holes on 45° staggered centers.



#### NEMA 12/UL 508 FILTER VERSION

- Air filters are removable and washable in detergent.
- Filter material: polyester urethane; UL 94-HF1 rated.1/2" thick core; 30 pores per inch.
- Frame material: 18 Ga. CRS.



U	A	B	C	D		
	inch	mm	inch	mm	Inch / mm	Inch / mm
12	21.12	536.45	27.68	703.07	24.00"	27.08"
16	28.12	714.25	34.68	880.87	(609.60mm)	(687.83mm)
20	35.12	892.05	41.68	1058.67		
24	42.12	1069.85	48.68	1236.47	30.00"	33.08"
30	52.62	1336.55	59.18	1503.17	(762.00mm)	(840.23mm)
35	61.38	1559.05	67.94	1725.67		
40	70.12	1781.05	76.68	1947.67	36.00"	39.08
44	77.12	1958.85	83.68	2125.47	(914.40mm)	(992.63mm)

**SCOPE OF SUPPLY:** Basic cabinet includes: 1 x frame, 2 x mounting rails (pairs, with 10A clip nuts and panel screws), 1 x base, 1 x top panel, painted and assembled

### Ordering Information

Please contact our sales department at 770.496.4000 or via email at [sales@optimastantron.com](mailto:sales@optimastantron.com) for specific model configurations.

### Standards Compliance

Optima Stantron's F-Series cabinet is compliant with the following specifications:

- NEMA 12/UL508
- EMC FCC Class A
- MIL-STD
- CISPR