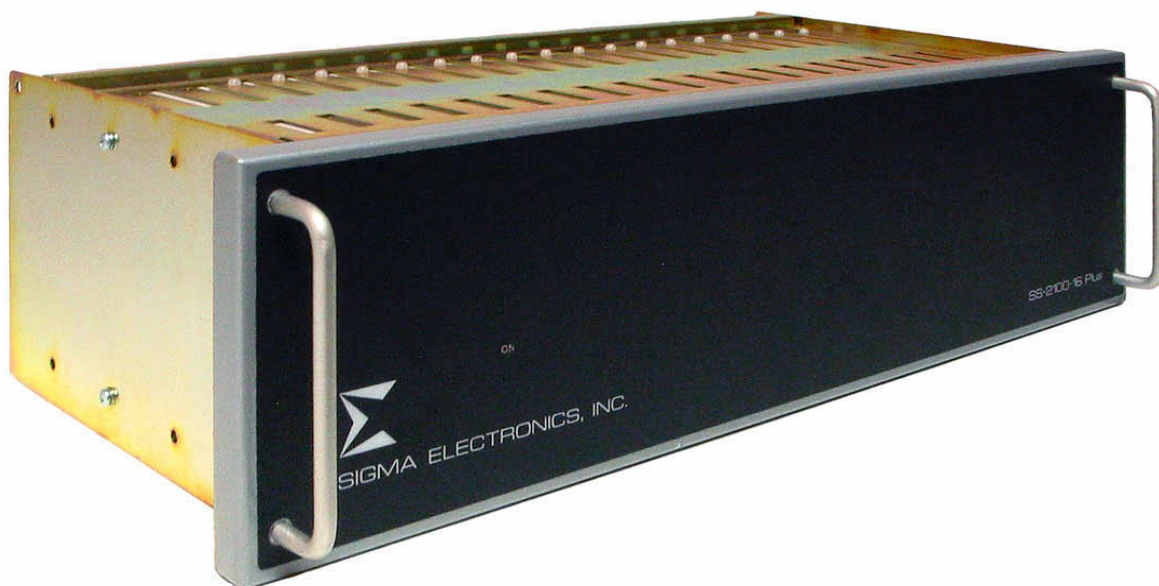


Series 2100
and HPX Series
FRAMES

INSTRUCTION MANUAL



SIGMA ELECTRONICS, INC.
P.O. Box 448
1027 COMMERCIAL AVENUE
EAST PETERSBURG, PA 17520-0448
(717) 569-2681

MODULAR FRAMES

GENERAL:

Sigma Series 2100 / HPX Series modules require a frame for operation. A modular mounting frame provides the required power supply, as well as protection of the module.

Sigma Electronics Inc. offers several frame configurations. Choice of frame depends on the application. Factors in selecting the frame include; number of modules to be installed, number of slots consumed per module and future expansion consideration. Sigma Electronics should be informed if a module order is an add-on to an existing frame to accommodate looping of the control bus if required.

◆ **SSB-21:** This is a desk top box providing a single horizontally oriented slot. The front panel provides an open access area which allows user interface to the module's front controls. Rack mounting is achieved with the optional RMK-26 rack mount kit. This will hold up to three Stand-Alone Boxes in 1 RU (1.75") without the need for blank panels when mounting one or two boxes. A Series 2100 module can be ordered as a Stand-Alone unit via a special model number. For example, VDA-26 includes the VDA-21 general purpose video DA module and SSB-21 Stand-Alone Box.

◆ **SS-2100-2:** This frame also provides a desk top configuration with Stand-Alone capabilities for module applications requiring two slots. It provides one column of two horizontally oriented slots. Two screws hold the solid front panel to the frame. Removal of the front panel allows access to the modules front controls. The SS-2100-2 is rack mounted with the optional rack mount tray (RMT-2100-2A). This rack mount tray will accommodate two of the SS-2100-2 frames. If a single frame is mounted in the RMT-2100-2A a blank panel (SBP-2102) can be used.

Three additional frames are available for EIA 19" rack mount applications without requiring optional mount trays. The frames outlined below, provide a greater number of slots for larger configurations.

◆ **SS-2100-6 / HPX-F6:** This is a 1 RU (1.75") frame providing six horizontally oriented slots. Access to the module front controls is achieved by pulling off the frames front panel. (Front panels are snapped to the frame by Tinnerman spring catch hardware and ball studs. Modules requiring more than 2 slots cannot be housed within this frame.

◆ **SS-2100-16 / HPX-F16:** This is the largest frame in the series. This frame is 3 RU (5.25") providing a single row of sixteen (16) vertically oriented slots. The design of this frame allows modules to consume any number of slots within the frame. This frame is necessary when utilizing any module which consumes more than two slots. The front panel is retained by two screws (for shipping) as well as the Tinnerman spring catch hardware. **NOTE: To allow access to the modules front controls the two screws should be removed before mounting the frame into a rack.**

◆ **SS-2100-12:** This 3 RU frame is configured with a redundant power supply. Otherwise, it is identical to the SS-2100-16 / HPX-F16 frame. The second power supply consumes 4 slots. Therefore, the SS-2100-12 has twelve (12) vertically oriented slots

NOTE: Modules of various functions, can be placed in a frame. Allowing vast flexibility while minimizing required rack space.

POWER:

The modular frame is provided with either a line cord or wall mount transformer. The frames with line cords can be configured for 117 VAC or 230 VAC mains applications. Normal configuration of the power transformer is for 117 VAC unless otherwise specified.

Frames supplied with wall mount transformers require specific transformers based on the mains voltage. Refer to the SPECIFICATIONS section for details of the power supply configurations.

MODULES:

Modules are inserted into the frame along the card guides provided in the frame. When inserting a module into the frame be certain the PCB edge is in the card guide. Do not slide the module in on the metal shield plate. The card edge connector inside the frame will align with the PCB. Make sure a positive connection is made by pushing the module fully into the frame. Attach it with the two (2) capture screws located on the back plate of the module. The capture screws attach to the threaded holes along the mounting rails of the frame.

User adjustments are accessible while installed in the frame. As previously indicated the SSB-21 has a slotted access area. The other frames require the front panel to be removed to gain access to the user controls.

MODULAR FRAMES

SPECIFICATIONS:

POWER: The Series 2100 modules receive power from the integral power supplies within the frame.

FRAME MODEL # ¹	VOLTAGE ² (VAC)	FREQ. (Hz)	POWER SUPPLY ³	FUSE RATING	VOLTAGE SOURCE	POWER ⁴
SSB-21	117 +/- 10%	50/60	SSB-21B	0.5A	WT-2100-2	8W
	234 +/- 10%	50/60	SSB-21B	0.5A	WT-2101-2	8W
SS-2100-2	117 +/- 10%	50/60	APA-2100-2	0.5A	WT-2100-2	14W
	234 +/- 10%	50/60	APA-2100-2	0.5A	WT-2101-2	14W
SS-2100-6 / HPX-F6	117 +/- 10%	50/60	APA-2100-6	2A	WT-2100-6	40W
	234 +/- 10%	50/60	APA-2100-6	2A	WT-2101-6	40W
SS-2100-12	117 +/- 10%	50/60	2 @ FPS-2100	2A	Line Cord	100W
	234 +/- 10%	50/60	2 @ FPS-2101	1A	Line Cord	100W
SS-2100-16 / HPX-F16	117 +/- 10%	50/60	FPS-2100	2A	Line Cord	100W
	234 +/- 10%	50/60	FPS-2101	1A	Line Cord	100W

Notes:

- 1 Add suffix of (230) when ordering the supply in a 230VAC configuration, i.e. HPX-F6 (230).
- 2 Source Voltage for Line Cord or Wall Transformer. Frame bus voltage ≈ +/- 19.5 V to modules.
- 3 Model number of Power Supply in frame. Wall Transformers provided with Frame where required (SSB-21, APA-2100-2 & APA-2100-6 models).
- 4 Power consumption is based on design limits per number of slots provided. Actual power consumption may be less, dependent upon the modules selected.

Dimensions: Data specified is frame size. Always allow adequate space for cable connections.

MODEL	DIMENSIONS:					
SSB-21	1.75"H	x	5.5"W	x	8"D	(44.5mm x 140mm x 203 mm)
SS-2100-2	1.75"H	x	7"W	x	8.5"D	(44.5mm x 178mm x 216 mm)
SS-2100-6 / HPX-F6	1.75"H	x	19"W	x	9.5"D	(44.5mm x 483mm x 242 mm)
SS-2100-12	5.25"H	x	19"W	x	9.5"D	(134mm x 483mm x 242 mm)
SS-2100-16 / HPX-F16	5.25"H	x	19"W	x	9.5"D	(134mm x 483mm x 242 mm)

Weight:

MODEL	WEIGHT:	
SSB-21	1.38 lb.	(0.62 kg)
SS-2100-2	1.30 lb.	(0.59 kg)
SS-2100-6 / HPX-F6	5.30 lb.	(2.41 kg)
SS-2100-12	15.62 lb.	(7.08 kg)
SS-2100-16 / HPX-F16	11.62 lb.	(5.27 kg)

NOTE: Data specified is for Frame and Power Supply only. Modules not included

All specifications, drawings, dimensions, weights and other details are subject to change without notification. Information is intended to give a general performance and operation guideline of the product.

Sigma Electronics, Inc.; P.O. Box 448; 1027 Commercial Ave.; East Petersburg, PA 17520-0448
Main Office: Tel: (717) 569-2681 Fax: (717) 569-4056