

FA-1616 Series Datasheet

(FA-1616HB-12G/1616B-12G/1616HB-3G)

1. Specifications

Basic specifications

Temperature	0°C to 35°C
Humidity	30% to 90% (no condensation)
Power	AC 100 V to 240 V \pm 10% 50/60 Hz
Consumption	FA-1616HB-12G: Approx 350 W FA-1616B-12G: Approx 350 W FA-1616HB-3G: Approx 350 W
Dimensions	430 (W) x 480 (D) x 44 (H) mm 480 (W) (Including rack mount brackets)
Consumables	Power unit Cooling fan

Technical specifications

Video format	2160/50p, 2160/59.94p, 1080/50p, 1080/59.94p, 1080/50i, 1080/59.94i * More formats will be supported sequentially.
Video input/output	
FA-1616HB-12G	Input: 12G/3G/HD-SDI 75-ohm Micro BNC (HD-BNC ^(*)) x 8 3G/HD-SDI 75-ohm Micro BNC (HD-BNC ^(*)) x 8 Output: 12G/3G/HD-SDI 75-ohm Micro BNC (HD-BNC ^(*)) x 8 3G/HD-SDI 75-ohm Micro BNC (HD-BNC ^(*)) x 8
FA-1616B-12G	Input or output: 12G/3G/HD-SDI 75-ohm BNC x 16
FA-1616HB-3G	Input or output: 3G/HD-SDI 75-ohm Micro BNC (HD-BNC ^(*)) x 32
VoIP input/output (FA-16VOIP)	IP Media Transmission Standard: ST2110-20, ST2022-6 SFP28 MSA (25 GbE) x 4 (ST2022-7 redundancy) Input/output < SMPTE ST 2110 > - Transmission only: HD x 16 / UHD x 4 - Receive only: HD x 16 / UHD x 4 - Transceiver: HD x 8 / UHD x 2 < SMPTE ST 2022-6 > - Transceiver: HD x 16 / 3G x 14
(FA-16VOIP-EX)	Same as above
Color sampling	YCbCr 4:2:2 10-bit
Genlock	Input: BB (NTSC or PAL) or Tri-level Sync 75-ohm BNC x 1 Output: BB (input loop-through or generated from PTP) 75 Ω BNC x 1
Timecode	Input: LTC (SMPTE 12M) DIN 1.0/2.3 x 1 Output: LTC (SMPTE 12M) DIN 1.0/2.3 x 1
Sync mode	Frame, Line, AVDL, Line(Min)

Converter (optional)	Up-/down-converter Conversion for color space and dynamic range
Frame delay (optional)	Max 4 frames (support planned)
Color processing	Proc Amp: Video level, Chroma level, Black level, Hue Color corrector: Balance (RGB) mode, Differential (YCbCr) mode Video clip: Knee Clip (RGB), YCbCr Clip
SDI audio	Input: 12G/3G/HD-SDI 16 channels 48 kHz 16- to 24-bit Synchronous / Asynchronous audio Output: 12G/3G/HD-SDI 16 channels 48 kHz 16/20/24-bit Synchronous / Asynchronous audio
AES/EBU audio	
(FA-16AES-UBL)	BNC x 4 (AES/EBU input or output) 8 channels Input: 32/44.1/48kHz 16-24-bit 75-ohm 1.0 Vp-p unbalanced Output: 48 kHz 16-24-bit 75-ohm 1.0 Vp-p unbalanced
(FA-16AES-PNL)	BNC x 4 (AES/EBU input or output) 8 channels Input: 32/44.1/48kHz 16-24-bit 75-ohm 1.0 Vp-p unbalanced Output: 48 kHz 16-24-bit 75-ohm 1.0 Vp-p unbalanced * FA-16AES-UBL required
Analog audio (FA-16ANA-AUD)	25-pin D-sub (female) x 1 Input: 4 channels 600-ohm/Hi-Z balanced Output: 4 channels 100-ohm balanced 24-bit 48 kHz (A/D D/A and internal processing)
MADI audio (FA-16MADI)	Input: 56/64 channels (PCM) 32/44.1/48kHz 16-24-bit 75-ohm BNC x 1 Output: 56/64 channels (PCM) 48kHz 16/20/24-bit 75-ohm BNC x 1
Dante audio input/output (FA-16DNT)	1000BASE-T RJ-45 x 2 (Primary/Secondary) Input: Max: 64 channels 44.1/48 kHz 16/24-bit Output: Max: 64 channels 48 kHz 16/24-bit
Audio delay adjustment	1 ms to 1,000 ms
Audio processing (optional)	Sample Rate Converter, Gain control, Downmix, Remap, Mute
Interface	
Ethernet	VoIP control (w/ FA-16VOIP): 100BASE-TX/1000BASE-T RJ-45 x 2 * Teaming available Device control and monitoring: 100BASE-TX/1000BASE-T RJ-45 x 1
Control protocol	Ember+, SNMP (monitoring) NMOS (w/ FA-16VOIP)
GPI	Standards: Round connector (7-input/output) FA-16GPI: 25-pin D-sub (female) x 1 (10 inputs, 10 outputs) FA-16GPI-PN: 25-pin D-sub (female) x 1 (10 inputs, 10 outputs) * FA-16GPI required

(*) HD-BNC is a trademark of Amphenol Corporation

Options

FA-16VOIP	VoIP card
FA-16VOIP-EX	VoIP expansion card
FA-16DNT	Dante audio card
FA-16MADI	MADI audio card
FA-16AES-UBL	Unbalanced AES audio card
FA-16AES-PNL	AES audio expansion panel
FA-16ANA-AUD	Balanced analog audio card
FA-16GPI	General purpose interface card
FA-16GPI-PNL	GPI expansion panel

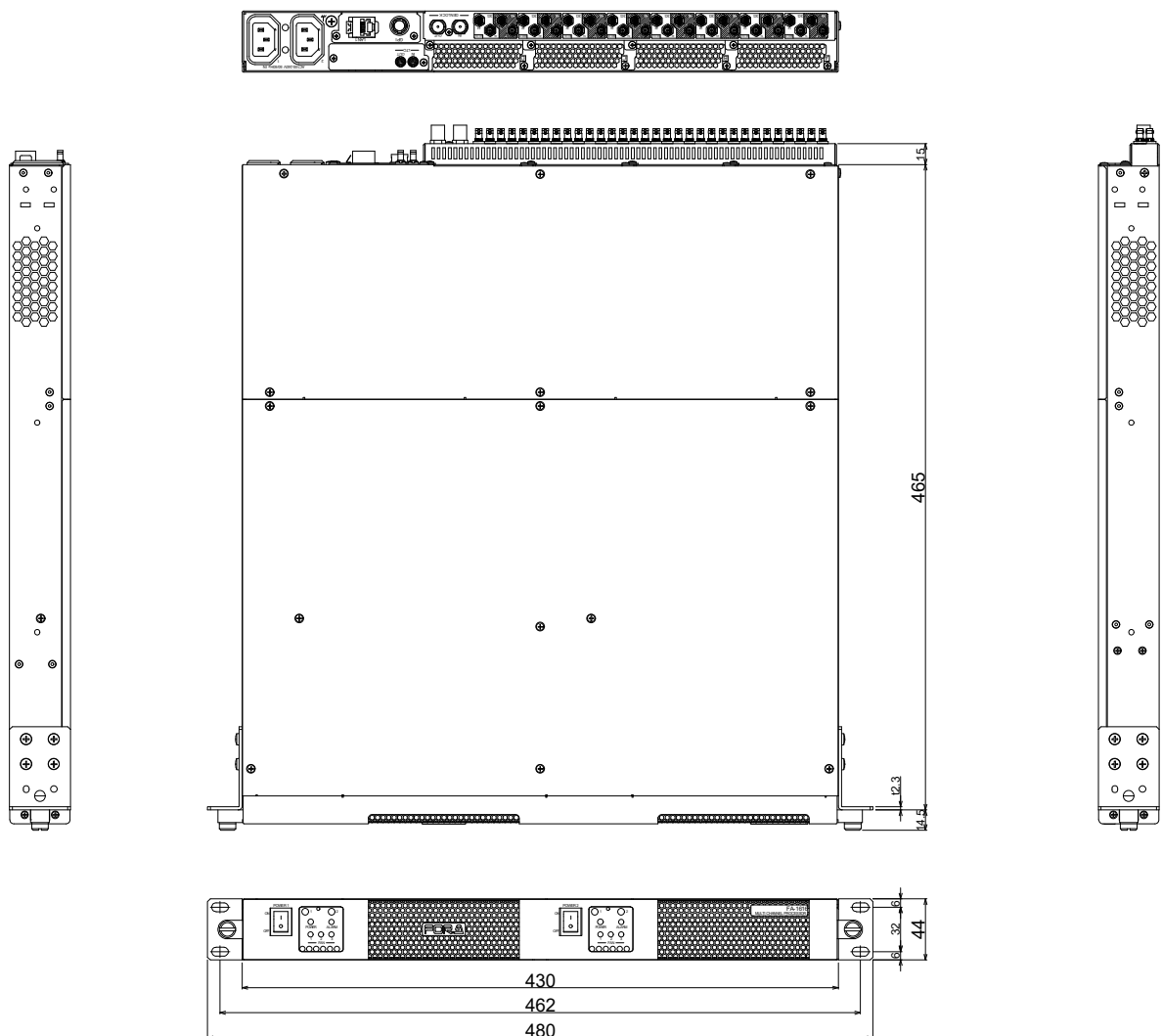
Accessories

AC cord, Rubber feet, EIA rack mount brackets, CD-ROM, and Quick setup guide

2. External Dimensions

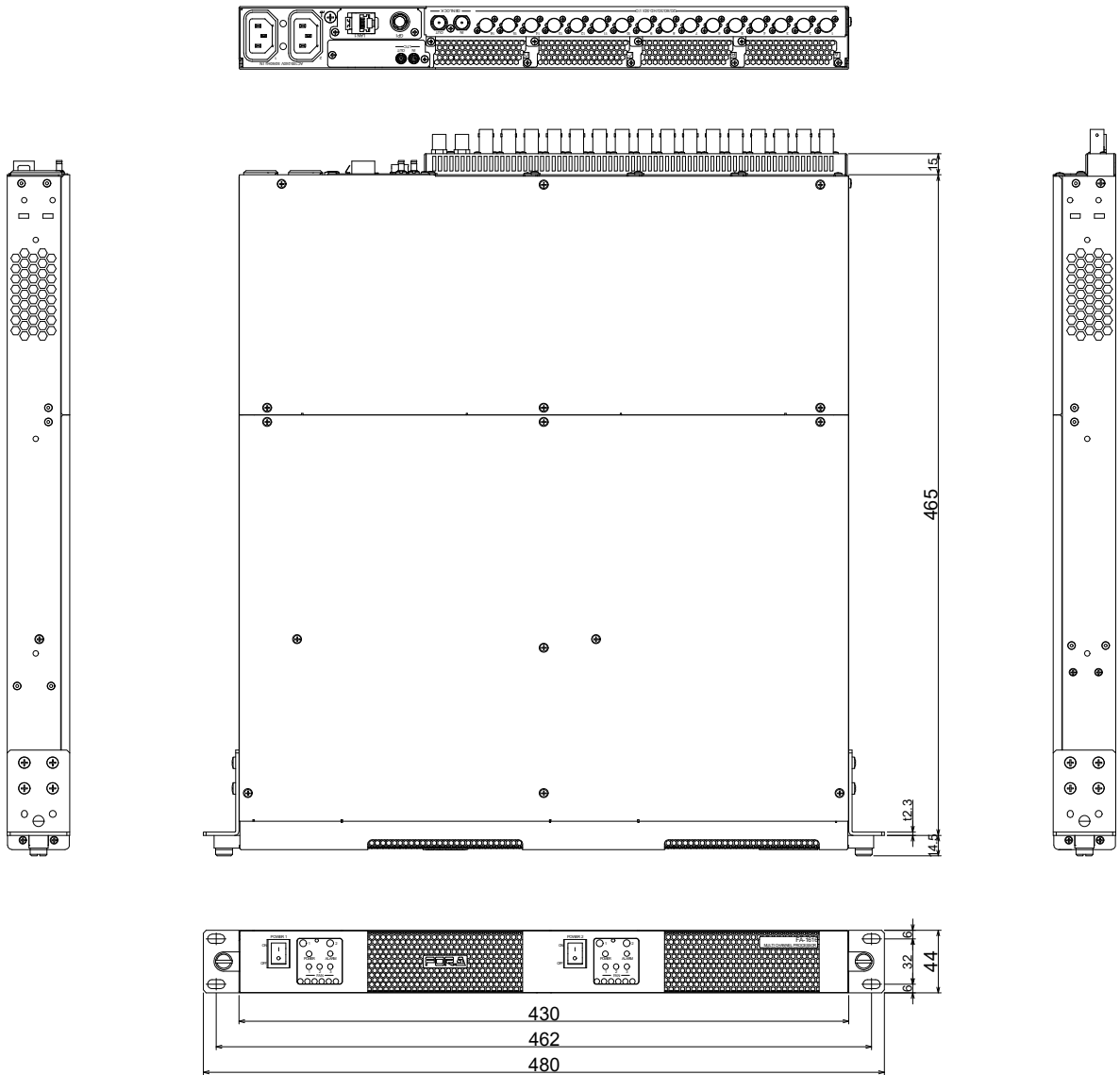
FA-1616HB-12G

(All dimensions in mm.)



FA-1616B-12G

(All dimensions in mm.)



FA-1616HB-3G

(All dimensions in mm.)

