

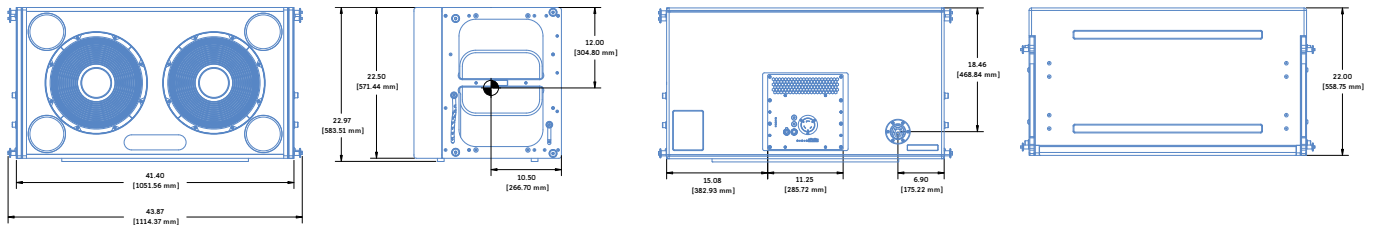


600-HP : Compact High-Power Subwoofer



600-HP shown with optional QuickFly MRF-600 rigging frame

- Dimensions** 41.40" w x 22.50" h x 22" d
(1052 mm x 572 mm x 559 mm)
- Weight** 182 lbs (82.55 kg); with rigging: 215 lbs (97.52 kg)
- Enclosure** Premium birch plywood
- Finish** Black textured
- Protective Grille** Powder-coated, hex stamped steel lined with acoustical black mesh
- Rigging** Optional end-mounted QuickFly® rigging hardware, with captive GuideALinks™ on the bottom four corners and quick-release pins; compatible with MICA™ compact high-power curvilinear array loudspeakers and accessories



The 600-HP is a self-powered, high-output subwoofer that may be used in both flown and ground-stacked configurations. It is available in three versions: as a portable version with handles, for installation without handles, or with rigging hardware. When fitted with the optional QuickFly MRF-600 rigging frame, the 600-HP is designed to rig directly with the MICA compact, high-power curvilinear array loudspeakers. The versatility of the 600-HP also allows it to be used with a variety of other Meyer Sound self-powered loudspeakers — including the CQ-1, CQ-2, UPA-1P, UPA-2P and UPJ-1P — in fixed and touring applications.

The system features two specially designed high-power 15-inch cone drivers, engineered to provide optimal performance in subwoofer applications. The high-excursion, back-vented drivers have 4-inch voice coils, and each is rated to handle 1200 watts (AES)*.

The two cone drivers are housed in a rectangular, optimally tuned and vented enclosure that is the same width as MICA, and a few inches higher and deeper. The enclosure geometry makes vertical ground-stacking easy and convenient. All versions include plastic skids on

the bottom of the unit to prevent damage to the enclosure or the unit below; the skids align with slots on the cabinet's top to ensure secure stacking. Operating frequency range is from 36 Hz to 150 Hz, with a peak SPL at one meter of 138 dB.

Each cone driver is driven by a channel of the integral two-channel class AB/H amplifier with complementary MOSFET output stages. Total output power is 2250 watts (4500 watts peak), providing the system with sufficient headroom to accommodate the most extreme sound reinforcement demands with ease. The circuitry includes TruPower® limiting to extend the life of the drivers and hold long-term power compression to less than 1 dB. The amplifier, control electronics, and power supply are integrated into a single, field-replaceable module that is mounted into the rear of the enclosure.

The optional MRF-600 rigging frame uses captive, rigid GuideALinks contained within recessed guides in the lower front and rear corners of the enclosure. A slot and convenient pinned handle allow the link to be moved and pinned for arraying or storage. The versatility of angles achieved by using combinations of

front and back positions allows a MICA array suspended under 600-HP subwoofers to be uptilted for balcony coverage up to 15 degrees, or downtilted to 6 degrees with respect to the 600-HP. The 600-HP can make use of the optional MG-MICA rigging grid to accommodate a variety of flown and stacked configurations.

The durable enclosure is constructed of premium birch plywood coated with a black, textured hard-shell finish, with a powder-coated, hex-stamped steel grille lined with acoustical black mesh to protect the drivers. The exterior dimensions of the 600-HP are suitable for both European and U.S. trucks, and it can securely travel in stacks using the MCF-MICA caster frame, or MDB-600 dolly board when not fitted with rigging frames.

Options for the 600-HP include weather protection and custom color finishes for fixed installations and other applications requiring specific cosmetics. The RMS™ remote monitoring system — standard with the rigging version and optional with other configurations — allows comprehensive monitoring of system parameters on a Windows®-based network.

*Driven continuously for two hours with a band-limited noise signal having a 6 dB peak-to-average ratio.

FEATURES & BENEFITS

- Efficient, high-power and high-excursion cone drivers
- Extremely low distortion for low-frequency clarity
- Very high peak power yields excellent transient reproduction
- Low-frequency complement to MICA and other Meyer Sound self-powered loudspeakers

When fitted with MRF-600 rigging frames:

- Stackable, and flyable by itself or with MICA full-range loudspeakers
- Transportable in stacks using optional MCF-MICA caster frame

APPLICATIONS

- Medium to large theatres and clubs
- Houses of worship
- Portable and installed A/V systems

600-HP SPECIFICATIONS

ACOUSTICAL	
Operating Frequency Range ¹	36 Hz – 150 Hz
Frequency Response ²	39 Hz – 130 Hz ±4 dB
Phase Response	46 Hz – 120 Hz ±30°
Maximum Peak SPL ³	138 dB
Dynamic Range	>110 dB
COVERAGE	
	360° (single unit); varies with number of units and configuration
TRANSDUCERS	
	Two 15" cone drivers Nominal impedance: 4 Ω Voice coil size: 4" Power handling capability: 1200 W (AES) ⁴
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection
Connectors	Female XLR input with male XLR loop output or VEAM all-in-one connector (integrates AC, audio and network)
Input Impedance	10 kΩ differential between pins 2 and 3
Wiring	Pin 1: Chassis/earth through 220 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 2: Signal + Pin 3: Signal – Case: Earth ground and chassis
DC Blocking	None on output, DC blocked through signal processing
CMRR	>50 dB, typically 80 dB (50 Hz–500 Hz)
RF Filter	Common mode: 425 kHz Differential mode: 142 kHz
TIM Filter	Integral to signal processing (<80 kHz)
Nominal Input Sensitivity	0 dBV (1 V rms, 1.4 V pk) continuous is typically the onset of limiting for noise and music
Input Level	Audio source must be capable of producing a minimum of +20 dBV (10 V rms, 14 V pk) into 600 Ω in order to produce maximum peak SPL over the operating bandwidth of the loudspeaker
AMPLIFIER	
Type	Two-channel complementary MOSFET output stages (class AB/H)
Output Power ⁵	2250 W
Total Output ⁶	4500 W peak
THD, IM, TIM	<.02%
Load Capacity	4 Ω each channel
Cooling	Forced air cooling, two fans total (one ultrahigh-speed reserve fan)
AC POWER	
Connector	250 V AC NEMA L6–20 twistlock, IEC–309 male, PowerCon, or VEAM
Automatic Voltage Selection	Automatic, two ranges, each with high-low voltage tap (uninterrupted)
Safety Agency Rated Operating Range	95 V AC – 125 V AC; 208 V AC – 235 V AC, 50/60 Hz
Turn-on and Turn-off Points	85 V AC – 134 V AC; 165 V AC – 264 V AC, 50/60 Hz
Current Draw:	
Idle Current	0.64 A rms (115 V AC); 0.32 A rms (230 V AC); 0.85 A rms (100 V AC)
Max Long-Term Continuous Current (>10 sec) ⁷	8.8 A rms (115 V AC); 4.4 A rms (230 V AC); 10 A rms (100 V AC)
Burst Current (<1 sec) ^{7,8}	19 A rms (115 V AC), 9.5 A rms (230 V AC), 22 A rms (100 V AC)
Ultimate Short-Term Peak Current Draw ⁷	39 A (115 V AC), 20 A (230 V AC), 45 A (100 V AC)
Inrush Current	7 A pk (115 V AC), 7 A pk (230 V AC), 10 A pk (100 V AC)
RMS NETWORK	
	Equipped with two-conductor twisted-pair network, reporting all operating parameters of amplifiers to system operator's host computer

NOTES:

1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
2. Free field, measured with 1/3-octave frequency resolution at 4 meters.
3. Measured with music referred to 1 meter, half-space loading.
4. Power handling is measured under AES standard conditions: transducer driven continuously for two hours with band-limited noise signal having a 6 dB peak-average ratio.
5. Amplifier wattage rating based on the maximum unclipped burst sine-wave rms voltage that the amplifier will produce for at least 0.5 seconds into the nominal load impedance: both channels 67 V rms into 4 ohms.
6. Peak power based on the maximum unclipped peak voltage that the amplifier will produce for at least 100 milliseconds into the nominal load impedance: both channels 95 V pk into 4 ohms.
7. Measured using pink noise as an input signal.
8. AC power cabling must be of sufficient gauge so that under burst current rms conditions, cable transmission losses do not drop voltage below specified operating range at the speaker.

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ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, sub-bass system that may be deployed as either a flown or a ground-stacked unit. The transducers shall consist of two 15-inch cone drivers (4-inch voice coil) each rated to handle 1200 AES* watts.

The loudspeaker shall incorporate internal processing electronics and a two-channel amplifier. Each amplifier channel shall be class AB/H with complementary MOSFET output stages. Burst power shall be 2250 watts (4500 watts peak) with a nominal 4-ohm resistive load. Distortion (THD, IM, TIM) shall not exceed 0.02%. Protection circuits shall include TruPower limiting. The audio input shall be electronically balanced with a 10 kOhm impedance and accept a nominal 0 dBV (1 V rms) signal (20 dBV to produce maximum SPL). Connectors shall be XLR (A–3) type male and female or VEAM all-in-one. RF filtering shall be provided, and CMRR shall be greater than 50 dB (50 – 500 Hz).

Performance specification for a typical production unit shall be as follows, measured at 1/3-octave resolution: Operating frequency range shall be 36 Hz to 150 Hz. Phase response shall be ±30° from 46 Hz to 120 Hz. Maximum peak SPL shall be 138 dB at 1 meter, half-space loading.

The internal power supply shall perform automatic voltage selection, EMI filtering, soft current turn-on and surge suppression. Powering requirements shall be nominal 100 V, 110 V or 230 V AC line current at 50 Hz or 60 Hz. UL and CE operating voltage ranges shall be 95 to 125 V AC and 208 to 235 V AC. Current draw during burst shall be 19 A rms at 115 V AC, 9.5 A rms at 230 V AC, and 22 A rms at 100 V AC. Current inrush during soft turn-on shall not exceed 7 A at 115 V AC. AC power connectors shall be NEMA L6–20, IEC 309 male, PowerCon, or VEAM all-in-one.

The loudspeaker shall optionally incorporate the electronics module for Meyer Sound's RMS remote monitoring system.

Loudspeaker components shall be mounted in a premium birch plywood enclosure with a black textured hard-shell finish. The unit shall accommodate an optional rigging frame, as well as options with and without carrying handles. Dimensions shall be 41.4" w x 22.5" h x 22.0" d (1052 mm x 572 mm x 559 mm). Weight shall be 182 lbs (82.55 kg). Weight with rigging shall be 215 lbs (97.52 kg).

The loudspeaker shall be the Meyer Sound 600-HP compact high-power subwoofer.

*Driven continuously for two hours with band-limited noise signal having a 6 dB peak-average ratio.