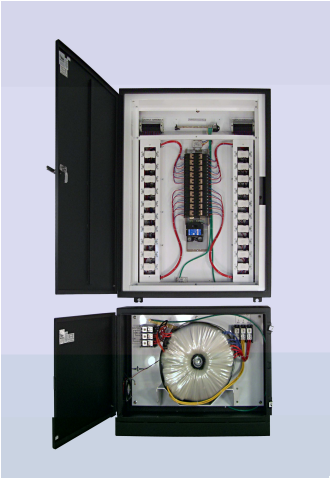
Wall Cabinet Systems

Equi=Tech ...Balanced Power Systems

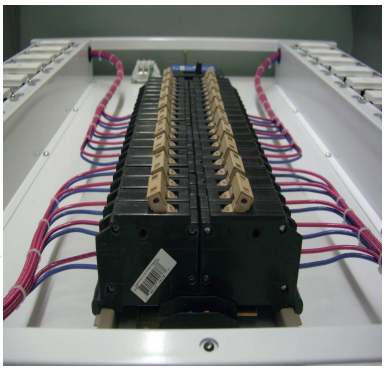
Product Information



Award winning Equi=Tech Wall Cabinet Systems are factory preassembled power distribution centers for hard wiring balanced AC power into a facility - a complete balanced power distribution system built into a wall cabinet. Only minimal installation is required eliminating many expensive hours of labor and hard to find electrical parts. All the necessary components such as transformer, breakers, GFCIs, surge protectors and line filters are factory assembled using the highest quality materials and components.

Wall systems are designed to blanket an entire facility with clean and phase coherent balanced AC power that remains stable regardless of how they are loaded down. 5, 7.5, 10, 15 and 20 kVA sizes provide 50, 75, 100, 150 or 200 amps respectively - ideal capacities for most studios and modestly sized theaters or auditoriums. These systems utilize the same precision toroid isolation transformers as Equi=Tech rack systems but they are much larger with a greater capacity. Wall systems are the easiest way to provide clean power for a larger facility, doing so with the assurance that the system will remain quiet regardless of what equipment is used or added to it at any time.

Wall system's components are housed in a sturdy NEMA 12 steel cabinet and feature a rugged industrial-duty AC distribution panelboard with commercial grade circuit breakers, ground fault circuit interrupters and optional EMI/RFI line filters for each circuit per request. (At the most, one or two are reccommended but none are required.) Two models, the 15WQ and 20WQ have a 2-part cabinet with an additional lower section that houses a massive toroid transfromer. The cabinets are available in black or light gray with a chrome latching handle and an enamel white interior. Wall cabinet systems have been tested safe and are built in compliance with ANSI/UL Std. 1012 for power distribution equipment.



All Equi=Tech Wall Cabinet Systems are built around revolutionary Equi=Tech Q-type isolation trandformers. Q-type toroid transformers are designed with extremely low impedance. They are wound with double Faraday shields that provide superior isolation (>100dB CMR) from high frequency RF, EMI and nuisance harmonic currents. "Q" transformers have been designed to run acoustically silent even in locations where there is considerably high utility line distortion and very poor power quality. They are much larger than standard toroids with an equivalent power rating and they run just slightly warm when operated near their rated current limit. A proprietary winding design eliminates high inrush current issues that are common with most toroid transformers. They also provide the widest possible broad band noise attenuation and distortion-free playback under the most trying conditions. Their performance is exceptional where power hungry amplifiers might otherwise choke during periods of high peak current demand when powered by a conventional AC supply. "Q" transformers add tightness and startling definition to low frequency music. In rooms with less than ideal acoustical features that are known to have a negative impact on low frequency sonic quality, they will restore the tightest bass with astonishing never-before-heard clarity and they will do it with ease. They are a must for recording studios that do mastering work and for high defintion audiophile stereo systems.

Standard Wall Cabinet Systems

Model No.	Output V	Main CB Output	# Output Circuits	GFCI or RCD ⏚ Protection	Input Line	Weight
5WQ	120/60V	50A	6-20A	yes	30A@208 / 240V 60Hz	319 lbs
5WQ-E	** 230/115V	30A	6 -10A or 15A	up to 6 or 10 by special request	* 13A @ 400V 50Hz or ** 25A@240V 50/60Hz	325 lbs 148 kg
7.5WQ	120/60V	70A	6-20A	yes	40A@208 / 240V 60Hz	351 lbs
7.5WQ-E	** 230/115V	40A	6 -10A or 15A	up to 6 or 10 by special request	* 20A@400V 50Hz or ** 40A@240V 50/60Hz	354 lbs 161 kg
10WQ	120/60V	100A	10-20A	yes	50A@208 / 240V 60Hz	385 lbs
10WQ-E	** 230/115V	50A	10 -10A or 15A	up to 10 by special request	* 25A@400V 50Hz or ** 50A@240V 50/60Hz	390 lbs 177 kg
15WQ	120/60V	150A	20-20A	yes	80A@208 / 240V 60Hz	601 lbs
15WQ-E	** 230/115V	80A	20 -10A or 15A	up to 20 by special request	* 40A@400V 50Hz or ** 80A@240V 50/60Hz	612 lbs 278 kg
20WQ	120/60V	200A	20-20A	yes	100A@208 / 240V 60Hz	673 lbs
20WQ-E	** 230/115V	100A	20 -10A or 15A	up to 20 by special request	* 50A@400V 50Hz or ** 100A@240V 50/60Hz	687 lbs 312 kg

* Standard "E" Wall Cabinet Systems accept a 380V/400V /415V 50Hz input voltage and provide a 220V/230V/240V 50Hz balanced output respectively (1.73:1 voltage ratio)
** Though not recommended due to higher transformer costs and a much larger feeder from the house panel, Wall Cabinet Systems may be custom ordered with a 1:1 voltage ratio
⏚ Residual current devices are required for receptacles in areas with common foot traffic or where shock hazzards exist. They are not required where wall outlets are inaccessible

Wall Cabinet Dimensions:

Model 5WQ - 7.5WQ - 10WQ
107cm H x 76cm W x 20cm D
42” H x 30” W x 10” D

Model 15WQ - 20WQ (Upper)
122cm H x 91cm W x 25cm D
48” H x 36” W x 12” D

Model 15WQ - 20WQ (Lower)
61cm H x 91cm W x 25cm D
24” H x 36” W x 12”

Wall Cabinet System Options

F -- EMI/RFI filter option* -- Filters are applied to the balanced output. Where a balanced power system's common mode noise rejection rolls off, EMI/RFI filtering begins. Some equipment power supplies are not very well balanced so some high frequency AC interference differs from typical power harmonics making these balanced multi-stage line filters a fine compliment to a balanced power system. Sensitive digital electronics in a system may require additional line filtering for best performance. Switching digital power supply noise is attenuated on the line and kept isolated from outlets that power other sensitive electronics. These filters reduce line noise -30dB from 100kHz to 2gHz.

OFC -- Oxygen-free copper wiring is used throughout the wall system assembly. Hand-made oxygen-free copper wiring jumpers and wiring harnesses are used in the assembly process that help to minimize high frequency current distortion. This method of wiring effectively increases the bandwidth of noise attenuation, especially when compared to the use of ordinary copper wire.

RCCB -- Residual current circuit breaker. There is no European device similar and equivalent in form to the faceless GFCI devices used with wall cabinet systems for 120-volt circuits in North America. What is needed abroad as it is in the US is a device designed to guard against electric shock hazards that are considerably greater outside of the US because 230 volts typically supplies electrical current to AC wall outlets. In North America, GFCI circuit breakers are used to provide protection for both 120-volt and 240-volt circuits. 240-volt versions of these are provided for systems destined for export in numbers that are appropriate depending on exposure to electrical shock hazards according to the judgment of the electrical contractor on the job. To keep costs within reason, GFCI circuit breakers are specified only as needed in lieu of RCD receptacles that are installed in the field and are equally effective but less costly. RCD receptacles that provide equivalent protection against electric shock for 230 volt circuits abroad may be used in the field with standard 2-pole circuit breakers as an alternative means of protection, but it is up to the electrical contractor to choose a device that in his own judgment is appropriate. 2-pole 240-volt GFCI circuit breakers such as those used in the US provide effective protection from electric shock abroad however they cost much more than the "faceless" GFCI devices used with 120V circuits domestically. Outside of the US, a field installed RCD receptacle is adequate and costs a fraction of the price so a 2-pole RCCB (GFCI circuit breaker) is not an absolute necessity. However if an RCCB were provided with every branch circuit, no further residual current protection devices would be needed. Providing some form of RCD protection is extremely important, especially abroad because typically the voltage present is twice as high as it is in the US. Please contact our technical sales department for further asssistance. We want you to use balanced AC power safely and with confidence the same way you depend on the same RCD or GFCI devices when you step into your jacuzzi or your outdoor spa.

Model 10WQ
Dimensions: 42" H x 30" W x 8" D

Model 20WQ (upper)
Dimensions: 48" H x 36" W x 10" D
Lower transfromer cabinet not shown: 30"H x 36"W x 10"D

All balanced power products shown here are manufactured under one or more of the following
U.S. Patents: 6,060,876- 5,969,510 - 5,892,667 - 5,640,314 - 6,278,266 -Other U.S. & International Pats. Pend.