

CREATING POWER SOLUTIONS.



iPP
intelligent Power Pack

Hatz Systems – Made in Germany



High-end power generation: iPP – intelligent Power Pack

The iPP is the “highest-end” solution of mobile generating sets. Exceeding industrial standards, the low noise level, its electrical efficiency, robustness and reliability set a new benchmark for compact generating sets.

Engine

Based on a Hatz 1B30V engine, the engine is fitted with a fully automatic load detection and engine speed control for a quick reaction on high power demands. For a further reduction of the engine noise and lower vibration levels, the engine is mounted on flexible mounts. A 3 litre oil sump with oil filter helps with 100 hours of maintenance free operation.

Electrical system

The Hatz iPP uses a permanent magnet generator [PMG] which is just 10 % of the size and 12 % of the weight of a conventional generator system. Thus, the basic system is more compact and flexible in everyday use.

The PMG produces high frequency and high voltage. The external inverter transforms the power from the PMG to high quality electricity, e.g. 230 V 50 Hz. As all Hatz gen-

erating sets, the iPP is designed in a modular system and could also be configured with either 28 V, 120 V or 400 V with 50 or 60 Hz DC on special request.

At the main panel of the 3.5 kVA generator, there are two 16 A Schuko sockets and a Multiflex engine control with remote start function.

Environmental aspects

With help of the automatic load detection and the automatic control of the engine speed, the iPP can operate at the speed of the highest fuel efficiency, thus reducing operation cost and environmental burden.

In terms of noise, the iPP exceeds the stringent limits of the EU 2000/14/EG legislation under all load conditions. The maximum noise level is 66 dB[A] in a 7 metre radius and 77 dB[A] in a 1 metre radius.

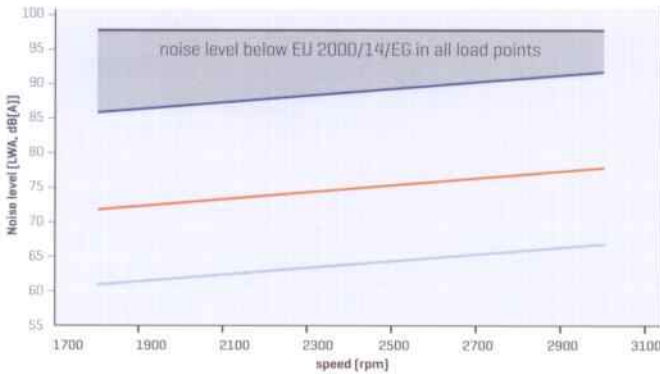


iPP Intelligent Power Pack up to 3.5 kVA

Compact, low-noise and economical: the iPP from Hatz offers fully-automatic load detection and load control of the engine speed. The iPP is currently available with 230 V, 50 Hz power output.

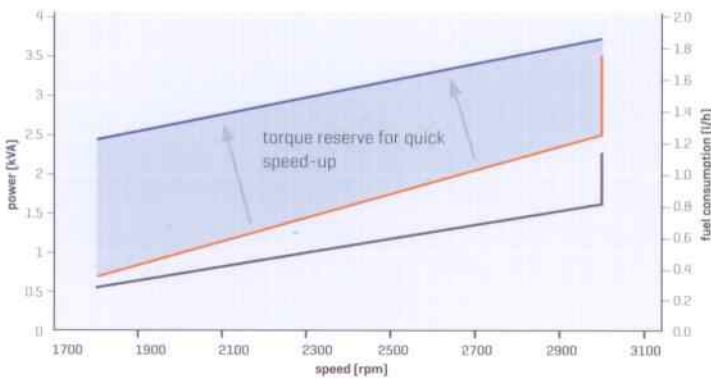
Noise emissions iPP with engine 1B30V

■ Noise level [LWA] ■ Noise level 1 m [dB(A)] ■ Noise level 7 m [dB(A)]



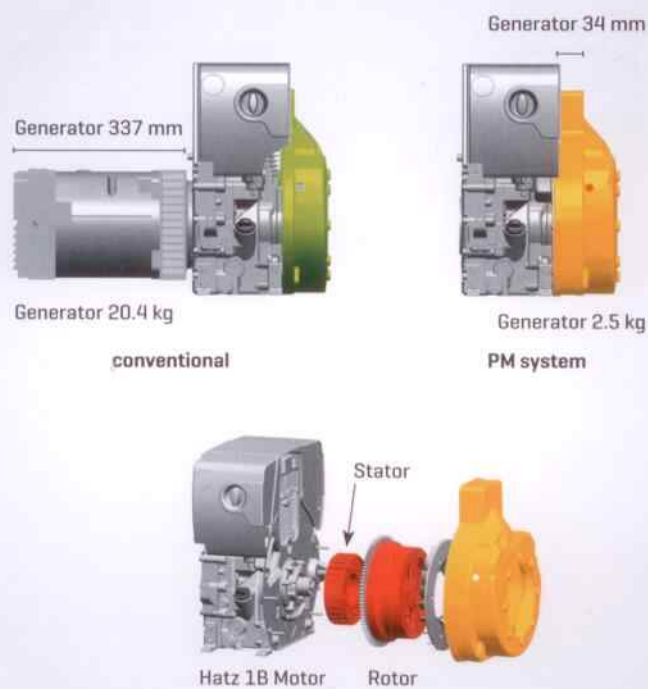
Electrical power and fuel consumption

■ power [kVA] ■ max. possible power [kVA] ■ fuel consumption [l/h]



Technical data	iPP
Engine	Hatz 1B30V
Maximum power [kW]	3.5
Speed range [rpm]	1800 - 3000
Generator	PMG
Max. generator power [kVA]	3.5
Frequencies [Hz]	50
Voltage [V]	230
Electrical efficiency [%]	81
Dimensions LxWxH [mm]	630 x 510 x 536
Weight [kg]	120

The engine speed is fully controlled by the effectively required electrical load. In the lower speed range, the power reserve is kept high to ensure that there is enough torque reserve to speed up the engine quickly to maximum speed in case of 0-100 % load step.



Engine/generator system comparison: Conventional vs. permanent magnet (PM)

Compared to the conventional design of the engine / generator unit, the PM construction is 303 mm shorter and 19.9 kg lighter. The contactless PM generator system has a high degree of efficiency at over 80 %.

Hatz power generating systems

Whether it be on a building site, agricultural situations, landscaping, on site operations or on assistance interventions – generating sets from Hatz are the ideal straightforward and reliable power generators.

The various designs are used as mains failure solutions, grid in-feed solutions or as permanent power solutions. Based on the motto "everything is possible", we offer you the best solution for your application. Our standard range of conventional power generators covers a performance spectrum from 2 to 35 kVA delivering 230 or 400 V. Various robust engines are available to choose from.

