

C Chassis Dynamometer



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Model: G-Dyno Series 型号: G-Dyno 系列

G-Dyno, the state-of-art chassis dynamometer series, is designed to tuning a variety of vehicles including cars, sport compacts, light commercial vehicles, ATVs and so on.

G-Dyno 汽车底盘测功机系列产品主要应用于车辆调试/标定, 适用于轿车、运动车辆、轻型商用车、ATV等。

With the air cooled eddy current power absorbing unit (or retarder) integrated, G-Dyno is able to track a quick load change rate by rapid load setting, richful control mode systems allows steady,transient and controllable acceleration rate operations.

测功机内置风冷式电涡流测功器, G-Dyno可以快速改变被试车辆的负荷, 进行稳态、瞬态以及可控加速度的各种测试。

The standard single PAU model, G-Dyno-1, is perfect for light vehicles including modified high performance cars. With model G-Dyno-2, which equipped with double PAUs and the wheelpower absorption capacity is doubled up to 1300hp, is ideal for most powerful racing cars. The model G-Dyno/AW, with patented M-Link, is suitable to test AWD cars while keep the front and rear wheels run synchronized.

在G-Dyno系列中, G-Dyno-1型装有一台测功器, 非常适合于轻型车辆的性能测试, 包括功率强化后的测试。而G-Dyno-2装有二台测功器, 其强大的功率吸收能力达到1300hp, 适用于特殊赛车测试。G-Dyno/AW则适用于各种类型的四驱车测试, 特别是由于装有M-Link™以保持各轴同步所以可以同时适用于前驱、后驱和四驱车辆。

In addition to determining vehicle traction force, torque and/or power characteristics, G-Dyno can be employed as a number of other roles, such as transmission loss testing, speedometer testing, noise level testing and more.

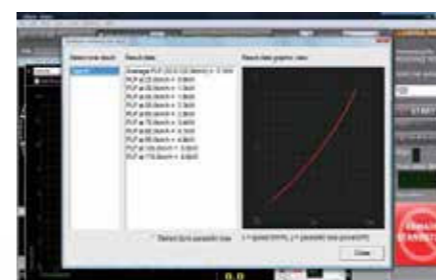
除了测试汽车驱动力、扭矩/功率特性之外, G-Dyno 还可以用于其它测试, 例如排放测试、传动损耗测试、发动机最大功率测试以及噪声和车速测试等等。

Features 主要特点

- Larger diameter rollers 转鼓直径大, 轮胎损耗小
Twin-roller mechanism with harden surface treatment, which allows car to stay on the rollers steady without damage to the tires.
- Low inertia of system 转动惯量小, 适应范围广
It is one of key factor for precise tuning jobs. The road load situation of those cars with modified engines and chassis characteristics can be simulated accurately.
- Easy calibration 标定方便
Computer aided calibrating and compensating mechanism. Each G-Dyno calibrated at the factory before shipping and make precise measurement with almost no further calibration needed by the end users.
- Easy installation 安装调试容易
G-Dyno can be installed into a pit or above floor as well by enduser just follow the instruction easily.
Anti-corrosion galvanized or powder spray frame structure.

Software Highlights 软件特点

- Richful user interface with easy-to-use functions. Real time data logging, curve analysis and 3D view make tuning and mapping much easier than ever.
通过易于操作的丰富界面, 实时数据采集方式, 曲线分析方式和三维显示, 极大的方便了mapping
- Supports both metrics and British unit systems. The dashboard views can be customized by users, with different shapes and values.
支持不同量纲, 用户可以自行选择显示方式
- Turn your Windows PC into a full testing lab. It is powerful, flexible and easy to use. It provides not only testing parameter controls but also analyzing tools to allow you to start/stop a load, display and trace real time data, compare key points and configurate hardware inputs.
功能强大和丰富的软件把您的计算机变成了一个容易操作的测试中心, 不但可以设置各种参数, 而且提供了分析工具, 可以操作负荷、显示和追踪数据等
- Torque/power output can be viewed in real time curve display at steady or changing speeds, so that the changes you have made on a enginefuel/timing maps can be evaluated instantly to diagnose engine and drive train problems.
可在固定或变动速度下测试扭矩/功率曲线, 对所做的发动机任何调整做出评价和诊断
- Many testing modes available.
有众多的测试模型可供选择

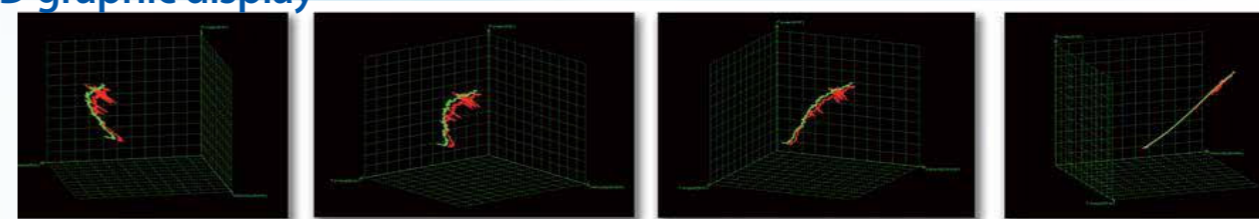


Measurement Variables 测试项目

- Graphic power curve. 功率曲线测试
- Transmission loss. 传动损失测试
- Point to point comparison function. 测试点比较功能
- Projection of engine power in compliance with SAE J1394 测试结果大气条件修正SAEJ394
- Speedometer test program 车速表各点校准
- Wheel power or track force at various speeds. 不同速度下的轮边功率驱动力
- Tires spin 轮胎状况
- Intelligent calibration 智能标定功能
- Sound level of loaded engine and transmission 负荷条件下的发动机和传动噪声测试



3-D graphic display



Optional peripherals 选件

Optional accessories can be selected by customers, including those to monitor air/fuel ratios, engine temperatures, inlet air temperatures, etc. These accessories will enable dynamometer technicians to diagnose and analyze various engine functions and problems, and see if there are improvements can be made.

The technicians can adjust various settings such as the amount of fuel injected into the cylinder, the ignition timing, VVT trigger, boost levels, and then retest and make sure that the changes work.

用户可按照自己的需要选择配备各种选件以测试发动机的工作情况和状态，选件包括空燃比计、油温计、进气真空度计等

A001000 Data logger 数据采集单元	8 channel sub-system, RS232C port via G-Dyno™ software。Optional inputs include RPM, Lambda, temperature, vacuum, OBD, etc. 220VAC 1kW。 8 通道系统, RS232C, 可以与转速计, 空燃比计, 真空元件, OBD 等连接 电源 Power supply 220VAC 1kW
A001001 Weather station 气象站	气压 Baro: 10-110kPa ±0.2% 温度 temperature 0-50°C ±0.5°C 湿度 Humidity 0-100% ±3%
A001002 ODB rpm pick up OBD 转速计	Support plug-in most modern car's OBD port directly 支持大多数现代车辆, 可直接与车载 OBD 口插接 量程 range 400-9,999rpm ±10rpm
A001003 Battery rpm pick up 电瓶式转速计	Real time display 实时显示转速 量程 Range 400-9,999rpm ±2%
A001004 Lambda module 空燃比模块	Wide band exhaust gas A/F ratio module 宽带式尾气空燃比测试模块 精度: accuracy: ±0.0005 (0.1AFR)
A001005 5 gas Analyzer 5 气体废气分析仪	Five gas analyzer, CO, CO2, HC, NO, via digital output follow OIML standard 五气体分析仪, 满足 OIML 标准
A001006 Opacity meter 不透光烟度计	Diesel engine exhaust smoke opacity meter via digital output 柴油车用烟度计, 数字输出 量程 range 0-100%
A001007 Temperature pick up 测温元件	Oil temperature pick up with digital link 机油温度测试元件 量程 range 0-200°C, ±1%
A001008 Vacuum pick up 真空度测试元件	Inlet vacuum pick up with digital link 进气真空度测试元件 量程 range 40-90kPa, ±1%
B002001 Vehicle cooling fan 车辆冷却风机	风量 Air flow 9300m3/h@1450rpm 电源 Power supply 380VAC 0.75kW
B002002 Power enhance kit 功率强化模块组	Additional Power kit include X1 retarder and peripherals 附加功率模块, 包括一台电涡流测功器及其附件



A001000



A001001



A001002



A001003



A001004



B002001



B002002

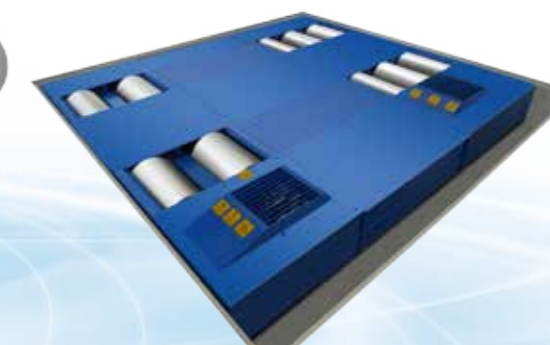
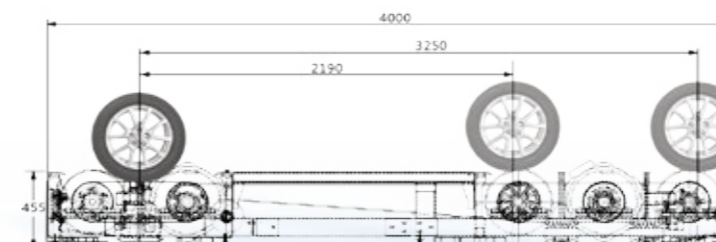
Specifications 技术规格表

ITEM	G-Dyno-1 (G-Dyno-2)	G-Dyno/AW
Peak power absorb capacity 最大吸收功率	650 (1,300) hp	650/1,300* hp
Axle load allowed 最大允测轴重	2,000kg/axle	
Maximum speed 最高车速	260km/h stable 300km/h transient	200 km/h stable 220km/h transient
Wheelbase adaptive range 适用轴距范围	---	2,190 ~ 3,250mm
Roller diameter 转鼓直径	400mm or 15.75 inch	
Track length range 跨距	1,050/2,250mm	
Lifter and braking 举升器和制动器	Pneumatic actuators of lifting/brake system 气动举升/制动	
Synchronization of roller axle 轴间同步装置	---	M-Link™ synchronizing mechanism M-Link™ 同步机构
Inter-bridge 中间过渡桥	---	Stand bridge with anti-slip covers 防滑钢板支撑桥
Power absorb unit 功率吸收单元	Eddy current air cooled (retarder) 风冷电涡流测功器	
Controls 控制方式	Digital close-loop with IGBT and G-Dyno application software 数字式闭环控制, IGBT 和 G-Dyno 软件	
Controller 控制单元	Unitest™ system, industrial computer, 1G memory, 32G disk 19" color screen, laser printer A4, standard keyboard	
Operation cabinet 控制柜	Powder spray surface with extended platform and casters 喷涂表面, 扩展台面, 脚轮	
Roller bed installation 台架安装方式	above/blow floor 地面下和地面上安装	
Power supply 电源	220VAC** single phase, 20/40*A	
Compress air supply 气源	0.6~0.9MPa (6~9bar)	
Dimension of cabinet 控制柜外形尺寸	900X600X1,050mm	
Dimension of roller bed 转鼓台架外形尺寸	420X1100X3,500 (4,100)mm	前台架 Rear 450X1,100X3,500mm 后台架 Front 450X1,900X3,500mm
Self-weight (approx.) 重量 (约)	1,600 (1,800)kg	3,700kg

* With optional kit of B002002 当配有选件B002002时
** Other specification of power supply is available 其它电源规格可选

G-Dyno/AW arrangement 四驱测功机同步传动

M-Link™ mechanism makes self-adaptive of wheel base, fit to test 2WD, 4WD and AWD cars very easy
专利型同步机构, M-Link 实现自动适应各种轴距以及各种不同的2WD, 4WD and AWD 车辆测试



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