Bellue

广东芸海君蓝科技有限公司
Guangdong Yunhai Junlan Technology Co., Ltd

广东省东莞市寮步镇松湖智谷科技产业园F2栋9楼
Add: 9th Floor, Building F2, Songhu Zhigu Technology Industrial Park,
Liaobu Town, Dongguan City, Guangdong Province
Tel: 0769-22013346 / 400-8066-828
E-mail: lhz@bellgroup.me
After-Sales Service tel: 0769-22673533

www.bellue.cn
www.bellgroup.me
www.belltestchamber.com

Bellue

PROFESSIONAL IN PROVIDING

NEW ENERGY VEHICLE TEMPERATURE CONTROL SOLUTIONS

专业提供新能源汽车温控解决方案



广东芸海君蓝科技有限公司
Guangdong Yunhai Junlan Technology Co., Ltd

COMPANY PROFILE

企业简介

广东芸海君蓝科技有限公司（以下简称芸海君蓝），隶属广东贝尔集团旗下子公司。

芸海君蓝专业从事新能源温控测试领域产品的研发、生产、销售。主要产品有新能源汽车高低温冷却液测试机、电池包液冷测试机、新能源汽车氟利昂直冷测试机等产品。

芸海君蓝坚持以人为本，采取一对一模式的线上线下服务，为客户创造无限价值，并始终如一的为客户提供优质产品，致力成为行业标杆企业。

我们拥有高水平的技术团队，并成立了技术研究开发中心，以保持技术的全面领先。以质量求生存，以科技求发展，本着“为客户产品测试提供一流解决方案，共赢创辉煌”的理念，我们愿与用户共同开发新能源前沿控温技术，推动新能源行业技术发展。

公司产品广泛应用于新能源汽车整车制造业、新能源汽车电机/控制器/动力电池包/动力总成制造业、电化学储能柜制造业、半导体制造业、精密仪器、相关研发机构、大学院所、国家质量检测机构等，深受用户好评。





Guangdong Yunhai Junlan Technology Co., Ltd. (hereinafter referred to as Yunhai Junlan) is a subsidiary of Guangdong Bell Group.

Yunhai Junlan specializes in the research and development, production and sales of products in the field of new energy temperature control testing. The main products include new energy vehicle high and low temperature coolant testing machines, battery pack liquid cooling testing machines, new energy vehicle Freon direct cooling testing machines, energy storage battery cluster liquid cooling testing machines and other products.

Yunhai Junlan adheres to the people-oriented approach and adopts one-on-one online and offline services to create unlimited value for customers, and consistently provides customers with high-quality products, striving to become a benchmark enterprise in the industry.

We have a high-level technical team and have established a technology research and development center to maintain overall leadership in technology. Survive by quality, develop by technology, and in line with the concept of "providing first-class solutions for customers' product testing, creating win-win results and creating brilliance", we are willing to jointly develop new energy cutting-edge temperature control technology with users to promote the technological development of the new energy industry.

The products are widely used in new energy vehicle manufacturing, new energy vehicle motor/controller/power battery pack/powertrain manufacturing, electrochemical energy storage cabinet manufacturing, semiconductor manufacturing, precision instruments, related R&D institutions, Universities, institutes, national quality inspection agencies, etc. are well received by users.

CORPORATE CULTURE
企业文化

企业使命
对内：为员工搭建创造幸福、实现梦想的平台
对外：为客户产品试验提供一流解决方案

Enterprise Mission
Internal: To provide employees with a platform to create happiness and fulfill their dreams.
External: To provide the best test solution for customers.

公司愿景
打造试验设备领导品牌

Corporation Vision
Build a leading brand in testing equipment industry

核心价值观
厚德：做人之原则　务实：处事之态度
服务：经营之理念　创新：发展之根源

Core Value
Morality: The principle of being a good person
Pragmatism: The attitude of handling things
Service: The concept of management
Innovation: The root of development

质量方针
质量第一　客户满意　持续改善　精益求精

Quality Policy
Quality first / Customer satisfaction
Continuous improvement / Pursuit of excellence

ENTERPRISE QUALIFICATION
企业资质





COOPERATION PARTNERS
合作伙伴

BYD
北汽新能源 BAIC BJEV
CHERY
Great Wall
KING LONG
NIO
TOYOTA
YUTONG
BUREAU VERITAS
中国汽研 CAERI
intertek
National research council Canada
SMVIC
TÜVRheinland
BAK
CATL
EVE ENERGY VERY ENDURE
FARASIS
Gotion
LG Energy Solution
SAMSUNG
AVIC 中航锂电
oppo
vivo
HUAWEI
lenovo
SONY
ZTE中兴
••• •••

HY系列 / HY SERIES

HIGH AND LOW TEMPERATURE TEST SERIES
高低温测试系列

新能源汽车行业技术进步，对温控测试技术提出了更高要求，为了适应新能源汽车行业测试的新需求，我公司所开发的新能源汽车液冷系统专用高低温冷却液测试机，在原有的模仿新能源汽车车载液冷系统的各种工况的基础上，不仅能测试电机、电控、电池的高温、低温耐受性、可靠性和性能参数，兼具散热效率、流阻、压降、耐压测试功能，还特别增加了多通道控温、流量精确控制、压力脉冲控制、恒功率控制等可选功能。

The technological progress of the new energy vehicle industry has put forward higher requirements for temperature control test technology. In order to adapt to the new requirements of the new energy vehicle industry testing, the special high and low temperature coolant test machine developed by our company for the new energy vehicle liquid cooling system is based on the original imitation of various working conditions of the new energy vehicle liquid cooling system. It can not only test the high temperature and low temperature tolerance, reliability and performance parameters of the motor, electronic control and battery, but also the heat dissipation efficiency, flow resistance, pressure drop and pressure resistance test functions, and especially increase the optional functions of multi-channel temperature control, flow accurate control, pressure pulse control and constant power control.



HIGH AND LOW TEMPERATURE TEST SERIES

HY系列 / HY SERIES

高低温测试系列

产品应用 Application



高低温液冷测试机 Battery pack liquid cooling testing machine

高低温液冷测试机是专门用于液冷电池包热学和流体力学测试的产品。它根据液冷电池包性能测试的要求，内置多种高性能传感器，能够测试液冷电池包的流量、压力、温度、密封，并可以为电池包提供全温区温度模仿、压力模仿、流量模仿等。产品支持CAN 及RS485 等通信模式，支持与上位机及充放电测试机通讯。

高低温液冷测试机内置加热器、制冷机组，并采用多PID 控制模式，可模拟电池包在实际运行中的各种工况，以测试电池包的可靠性和稳定性。

The hight & low temperature liquid-test machine is specially used for thermal and fluid mechanics testing of liquid cooled battery packs. According to the requirements of the performance test of the liquid cooled battery pack, it has built-in a variety of high-performance sensors, which can test the flow, pressure, temperature, sealing of the liquid cooled battery pack, and can provide the full temperature zone temperature imitation, pressure imitation, flow imitation and so on. The product supports communication mode such as CAN and RS485, and supports communication with host computer and charge and discharge tester.

The hight & low temperature liquid-test machine has built-in heater and refrigeration unit, and adopts multi-PID control mode, which can simulate various working conditions of the battery pack in actual operation to test the reliability and stability of the battery pack.



产品选型列表 Product Selection List

类别 Category	型号 Model	温度范围 Temperature range	流量范围 Flow range	压力范围 Pressure range	温区数量 Temperature zone quantity	冷却方式 Cooling mode
PACK	HY10-DF/S	-40-85℃	1-30L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY15-DF/S	-40-85℃	1-30L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY20-2DS	-40-85℃	1-30L	0-300Kpa	双温双路 dual-temperature dual-channel	水冷 Water cooling
	HY30-2DS	-40-85℃	1-30L	0-300Kpa	双温双路 dual-temperature dual-channel	水冷 Water cooling
模组 Module	HY02-F	5-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷 Air cooling
	HY05-F	5-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷 Air cooling
	HY05-DF/S	-30-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY10-2DF/S	-40-85℃	1-30L	0-300Kpa	单温双路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY15-2DF/S	-40-85℃	1-30L	0-300Kpa	双温双路 dual-temperature dual-channel	风冷/水冷 Air cooling/ water cooling
电机 Motor	HY20-F/S	5-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY25-F/S	5-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY30-DS	5-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling
	HY20-DS	-40-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling
	HY25-DS	-40-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling
	HY30-DS	-40-120℃	2-40L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling
	HY40-2DS	-40-120℃	2-40L	0-300Kpa	双温双路 dual-temperature dual-channel	水冷 Water cooling
控制器 Controller 半导体 semiconductor	HY02-F	5-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷 Air cooling
	HY05-F	5-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷 Air cooling
	HY05-DF/S	-30-85℃	1-20L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY10-DF/S	-40-100℃	1-30L	0-300Kpa	单温单路 Single temperature single channel	风冷/水冷 Air cooling/ water cooling
	HY25-DS	-40-100℃	1-30L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling
	HY30-DS	-40-100℃	1-30L	0-300Kpa	单温单路 Single temperature single channel	水冷 Water cooling

- 制冷/加热功率、流量、温度、压力可定制
  Cooling/heating power, flow, temperature, pressure can be customized

DIRECT COOLING TEST MACHINE SERIES

HZ系列 / HZ SERIES

直冷测试机系列

氟利昂/CO_2直冷测试机是专门用于氟利昂直冷型电池包的测试设备，通过控制氟利昂的压力、过冷度、过热度、质量流量分配等方式控制整机工况参数，以实现模仿整车直冷温控状态下热学测试。其可选择制冷工况、热泵工况、PTC预热工况三种模式。

氟利昂直冷系统与传统液冷温控相比，减少了冷却液循环组件，可靠性更高、整机重量更轻、能耗更小、工况更稳定的优势，是未来新能源汽车热温控方面的主要发展方向，广泛应用于新产品开发和质量控制。

Refrigeration /CO_2 direct cooling test machine is specially used for Freon direct cooling battery pack test equipment, through the control of Freon pressure, super-cooling, super-heat, mass flow distribution and other ways to control the working parameters of the whole machine, in order to imitate the vehicle direct cooling temperature control state of thermal testing. Three modes are optional: refrigeration condition, heat pump condition and PTC preheating condition.

Compared with traditional liquid cooling temperature control, Freon direct cooling system reduces the coolant cycle components, has the advantages of higher reliability, lighter weight, less energy consumption and more stable working conditions, and is the main development direction of new energy vehicle thermal temperature control in the future, and is widely used in new product development and quality control.



产品特点 Product Features

- 模仿整车直冷 / 加热系统工况，提供测试技术条件
- 氟利昂直接冷却，无冷却液循环，节能高效
- 兼具直冷和直热功能，可满足电池在多种工况下的测试需求
- 可实现过冷/过热度调节
- 可实现蒸发压力调节
- 自带制冷剂质量流量显示
- 设备具备远程通讯功能，支持RS485、CAN、CANFD等通讯
- 具备动力电池双冷板/双系统直冷测试

- Imitate the vehicle Refrigeration cooling/heating system conditions to provide test technical conditions;
- Refrigeration cooling, no coolant circulation, energy saving and high efficiency
- With both Refrigeration cooling and direct heating functions, it can meet the test needs of the battery under various working conditions
- Subcooling/super heat degree adjustment
- The evaporation pressure can be adjusted
- With refrigerant mass flow display
- The equipment has the function of remote communication, supporting RS485, CAN, CANFD and other communication
- Double cooling test for double power battery system

产品应用 Application

电池包恒温控制 Battery pack thermostatic control	电池包制冷控制 Battery pack cooling control	电池包热泵预热 Battery pack heat pump preheating
整车控温 Vehicle temperature control	过热度控制 Super-heat control	过冷度控制 Super-cooling control
整车压力控制 Vehicle pressure control	制冷剂质量流量显示 Refrigerant mass flow display	双系统测试 Dual system test

产品选型列表 Product Selection List

型号 Model	制冷量 Refrigerating capacity	制热量 Heat production capacity	过热度 Degree of super-heat	过冷度 Degree of super-cooling	尺寸 / Size (WXDXH) mm
Hz05	5KW	5KW	3±2℃	5±3℃	800*1200*1500
Hz10	10KW	10KW	3±2℃	5±3℃	1000*1500*1500
Hz20	20KW	20KW	3±2℃	5±3℃	1350*1750*1950

ENERGY STORAGE CABINET TEMPERATURE CONTROL UNIT

储能测试系列 / ENERGY STORAGE TEST SERIES

储能柜温控机组

储能柜温控机组是专门用于电化学储能行业的一种温控设备，它采用压缩机制冷原理，结合制冷、热泵、PTC加热等多种工作模式，以实现对储能柜高性能控温的目的。储能柜温控机组为了适应严苛的使用环境，严格按照IP54环境耐受性要求设计，采用多项高寿命设计方法和严格的工艺控制流程，能满足长期在高温高湿盐雾沙尘环境下正常使用。

Energy storage cabinet temperature control unit is a temperature control equipment specially used for electrochemical energy storage industry, it adopts the principle of compressor refrigeration, combined with refrigeration, heat pump, PTC heating and other working modes, in order to achieve the purpose of high performance temperature control of energy storage cabinet. In order to adapt to the harsh use environment, the temperature control unit of the energy storage cabinet is designed in strict accordance with the environmental tolerance requirements of IP54, and adopts multiple long-life design methods and strict process control processes, which can meet the long-term normal use in the high temperature and high humidity salt spray sand environment.



产品特点 Product Features

- 支持自然散热/制冷/热泵/PTC 预热/恒温多模式运行;
- 耐受各种高温、低温、高盐等气候环境;
- 一体化IP54防水防尘设计，安装维护方便;
- 节能设计，效率高，可靠性高，使用寿命长;
- 可实现与上位机通讯，支持物联网远程控制。

- Support natural heat dissipation/refrigeration/heat pump /PTC preheating/constant temperature multi-mode operation;
- Withstand all kinds of high temperature, low temperature, high salt and other climate environment;
- Integrated IP54 waterproof and dust-proof design, easy installation and maintenance;
- Energy-saving design, high efficiency, high reliability, long service life;
- It can communicate with the host computer and support IoT remote control.

产品应用 Application

风能发电集装箱电池恒温控制 Wind power container battery constant temperature control	太阳能发电集装箱电池恒温控制 Solar power container battery constant temperature control	
电网端电池柜恒温控制 Constant temperature control of battery cabinet at grid end	小区储能电池柜恒温控制 Community energy storage battery cabinet constant temperature control	商用备电柜电池恒温控制 Commercial backup cabinet battery constant temperature control
民用电池柜恒温控制 Civilian battery cabinet constant temperature control	乘用车换电站温控 Temperature control of passenger car changing station	商用车换电站恒温控制 Constant temperature control of commercial vehicle changing station

主要技术指标参数表 Table of Main Technical Index Parameters

8kW性能技术指标 / 8kW Performance Technical Indicators

项目 Item	参数 Parameter
模式 Mode	单冷+电加热 Mode single cooling+ electric heating
安装方式 Installation mode	立式 Vertical
制冷剂 Refrigerant	R134A (或其它/or other)
制冷量 Refrigerant capacity	≥8KW
COP	≥2.0
制热量 Heat capacity	10KW
载冷剂 Refrigerant	50%乙二醇水溶液 50% Glycol solution
输入电压 Input voltage	380V
输入频率 Input frequency	50/60Hz
整机尺寸/Overall size L×W×H(mm)	1300*296*1140

15kW性能技术指标 /15kW Performance Technical Indicators

项目 Item	参数 Parameter
模式 Mode	热泵+重力热管 Heat pump+ gravity heat pipe
安装方式 Installation mode	立式 Vertical
制冷剂 Refrigerant	R134A (或其它/or other)
制冷量 Refrigerant capacity	≥15KW
COP	≥2.0
制热量 Heat capacity	10KW
载冷剂 Refrigerant	50%乙二醇水溶液 50% Glycol solution
输入电压 Input voltage	380V
输入频率 Input frequency	50/60Hz
整机尺寸/Overall size L×W×H(mm)	1000*680*2450

40kW性能技术指标 /40kW Performance Technical Indicators

项目 Item	参数 Parameter
模式 Mode	单冷+电加热 Mode single cooling+ electric heating
安装方式 Installation mode	立式 Vertical
制冷剂 Refrigerant	R134A (或其它/or other)
制冷量 Refrigerant capacity	≥40KW
COP	≥2.0
制热量 Heat capacity	6.5KW
载冷剂 Refrigerant	50%乙二醇水溶液 50% Glycol solution
输入电压 Input voltage	380V
输入频率 Input frequency	50/60Hz
整机尺寸/Overall size L×W×H(mm)	1150*1150*2300

ENERGY STORAGE BATTERY CLUSTER LIQUID COOLING TEST MACHINE

储能测试系列 / ENERGY STORAGE TEST SERIES

储能电池簇液冷测试机

储能电池簇液冷测试机专门用于电化学储能电池簇测试，它采用压缩机制冷原理，结合制冷、热泵、PTC加热等多种工作模式，以实现对储能电池簇的性能测试。采用一机多通道设计，对电池簇多电池包进行温度、压力、流量等相关参数的耐受性测试。

Energy storage battery cluster liquid cooling test machine is specially used for electrochemical energy storage battery cluster test, it adopts compressor refrigeration principle, combined with refrigeration, heat pump, PTC heating and other working modes, in order to achieve the performance test of energy storage battery cluster. The temperature, pressure, flow and other related parameters of the battery cluster multi-battery pack were tested by the design of one-machine multi-channel.



产品特点 Product Features

- 节能设计、可靠性高、使用寿命长
- 上位机通道，远程控制
- 一机多路，同时对电池簇各电池包展开性能测试
- Energy-saving design, high reliability, long service life
- Upper computer channel, remote control
- The performance of each battery pack in the battery cluster is tested at the same time

主要技术指标参数表 Table of Main Technical Index Parameters

- 15kW性能技术指标 / 15kW Performance Technical Indicators

项目 / Item	参数 / Parameter
规格 / Specification	15KW 6路 / 15KW 6 way
加热 / Heating	21KW
制冷 / Cooling	15KW
总流量 / Total flow rate	20-120L/min
精度 / Accuracy	±0.5L/min
分流量 / Shunt volume	1-20L/min
温度 / Temperature	5-60℃
压力 / Pressure	0~300kPa
精度 / Accuracy	±5Kpa
整机尺寸 / Overall dimension (mm)	W900*L1950*H1900

- 40kW性能技术指标 / 40kW Performance Technical Indicators

项目 / Item	参数 / Parameter
规格 / Specification	40KW 12路 / 40KW 12 way
加热 / Heating	40KW
制冷 / Cooling	40KW
总流量 / Total flow rate	50-240L/min
精度 / Accuracy	±0.5L/min
分流量 / Shunt volume	1-20L/min
温度 / Temperature	5-60℃
压力 / Pressure	0~300Kpa
精度 / Accuracy	±5Kpa
整机尺寸 / Overall dimension (mm)	W1150*L2400*H1900

- 制冷/加热功率、流量、温度、压力、测试流路可定制
  Cooling/heating power, flow, temperature, pressure can be customized