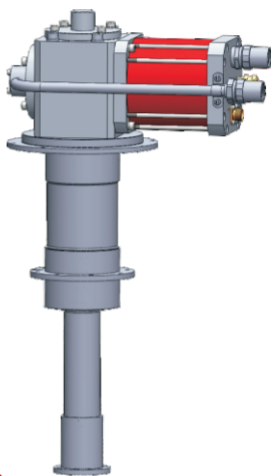




4K TWO-STAGE G-M CRYOCOOLERS

# 4K G-M制冷机



浙江博开机电科技有限公司  
Zhejiang Bwokai Technologies Co.,Ltd

# COMPANY PROFILE / 公司简介

---

● 浙江博开机电科技有限公司成立十五年以来，深耕G-M制冷机、低温真空泵等低温真空领域。公司拥有一批多年从事低温真空行业的专业技术人员，并和相关高等院校、科研院所建立良好合作关系，不断保持行业技术领先性。

● Since the establishment of Zhejiang Bwokai Technology Co.,Ltd., the field of low temperature vacuum, such as G-M Cryocoolers and Cryopump, has been established for 15 years. The company has a number of professional technicians who have been in the low temperature vacuum industry for many years, and have established good cooperative relations with the relevant colleges and universities, and continuously keep the industry technical leading.

● 公司产品涵盖4K制冷机、10K制冷机、77K制冷机系列化低温制冷机以及160mm口径-1600mm全口径系列低温泵，为全球超过300家企业单位、高校和科研院所提供优质的产品和服务。

● The company products include 4K, 10K and 77K Series Cryocoolers, and 160mm-1600mm caliber Cryopumps, to provide quality products and services for more than 300 enterprise units, colleges and institutes in the world.



## PRODUCT OVERVIEW / 产品概述

---

● G-M制冷机是一种结构简单、使用方便、运转可靠的小型低温回热式气体制冷机，利用西蒙绝热膨胀的原理为被冷却对象提供稳定的冷源。由于尖端科技的发展需要，G-M制冷机的技术和应用得到长足发展，被广泛应用于量子通讯、半导体、生物核磁、医用磁共振、超导磁体、低温物理、空间模拟等领域中。

● The G-M Cryocooler is a simple, convenient and reliable low temperature regenerative gas cryocooler, and use the Simon's expansion principle to provide a stable cold source for the cooled object. Due to the development of cutting-edge technology, the technology and application of the G-M Cryocooler have come a long way, widely used in the fields of QKD, Semiconductor, NMR, MR, Superconducting Magnet, LT and Space simulation.

## PRODUCT CHARACTERISTICS / 产品特点

---

**闭循环制冷，无需液氦**

Closed cycle cooling without liquid helium

**运行稳定，无故障运行时间长**

Running stable, long mean time between failure

**低振动，适用性强**

Low vibration, strong applicability

**可在各安装方向正常工作**

Can work in all directions

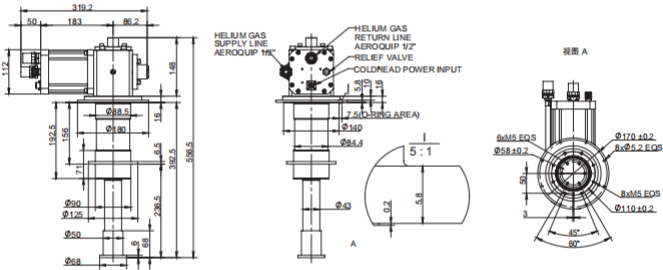
**降温时间短，时间成本低**

Low cooling time, low time cost

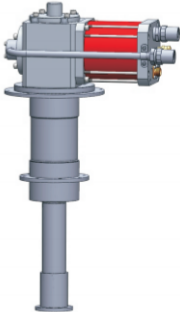
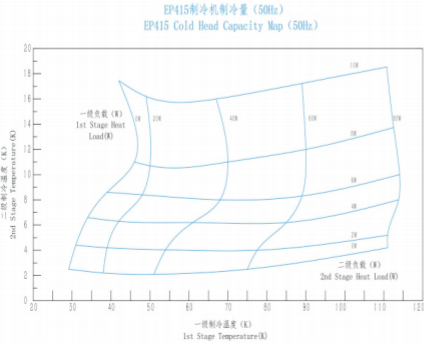
# EP415制冷机 EP415 Cryocooler

极限温度 Minimum Temperature	<2.5K	
制冷功率 Capacity	一级冷头 1st Stage Capacity	≥35W@50K
	二级冷头 2nd Stage Capacity	≥1.5W@4.2K
降温时间 Cooldown Time	≤50min @4.2K	
匹配压缩机 Compressor Options	HC100W	
输入功率 Input Power	6.5-7.3kW	
冷却方式 Cooling Mode	水冷 Water-cooled(>6L/min)	
工质 Compressible medium	He≥99.999%	
外形尺寸 Dimensions(H*W*D)	制冷机 Cryocooler	327mm×180mm×574mm
	压缩机 Compressor	626mm×515mm×579mm
重量 Weight	制冷机 Cryocooler	18.2kg
	压缩机 Compressor	118kg
标准软管 Helium Gas Lines	3/4"	

## 外形尺寸图 Outline Drawing



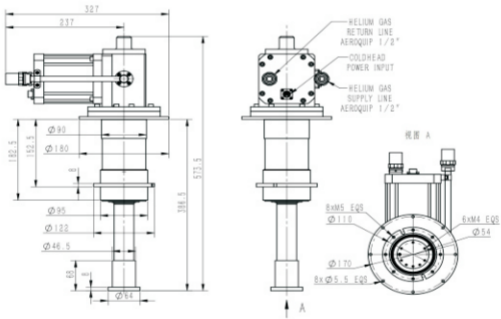
## 冷量曲线 Capacity Map



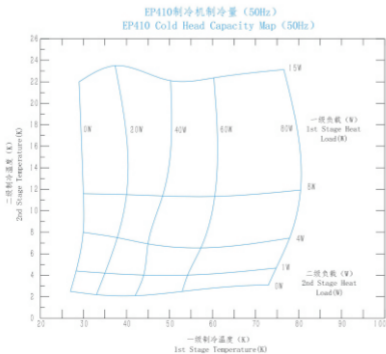
# Ep410制冷机 EP410 Cryocooler

极限温度 Minimum	<2.5K	
制冷功率 Capacity	一级冷头 1st Stage Capacity	≥40W@50K
	二级冷头 2nd Stage Capacity	≥1.0W@4.2K
降温时间 Cooldown Time	<50min (4.2K)	
匹配压缩机 Compressor Options	HC100W	
输入功率 Input Power	6.5-7.3kW	
冷却方式 Cooling Mode	水冷 Water-cooled (>6L/min)	
工质 Compressible medium	He≥99.999%	
外形尺寸 Dimensions (H*W*D)	制冷机 Cryocooler	327mm×180mm×574mm
	压缩机 Compressor	626mm×515mm×579mm
重量 weight	制冷机 Cryocooler	17.5kg
	压缩机 Compressor	118kg
标准软管 Helium Gas Lines	3/4"	

## 外形尺寸图 Outline Drawing



## 冷量曲线 Capacity Map





合作发展 共创未来  
携手共进 合作共赢



浙江地址：浙江省浦江县一点红大道966号科创园E幢

合肥地址：安徽省合肥市经开区汤口路2766号香馨  
创谷产业园2号楼1405室

电话：0579-84193027      0551-65842925

传真：0579-84194365      0551-65842825

[Http://www.bwokai.com](http://www.bwokai.com)