



色谱制造商核心合作伙伴

A Primary Partner of LC Manufacture

北京清博华科技有限公司

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北京清博华科技有限公司
Beijing QingBoHua Technologies

公司 / 介绍 Company Introduction

清博华科技专注于色谱仪器核心部件的设计、开发和生产，提供质量可靠的高压输液泵、中压输液泵、检测器、馏分收集器和色谱工作站，广泛应用于分析型高效液相色谱、高压制备、中压制备色谱、离子色谱等设备。

针对不同的应用场景，我们为用户提供多种选择。

不同材质的高压输液泵头，包括：不锈钢、钛合金、哈氏合金、PEEK、PTFE 及 PCTFE；多种类型的检测器，包括：通用型 UV 检测器、光纤检测器和 LED 单波长检测器。

适用不同场景的馏分收集器：半制备型馏分收集器和制备型阀收集器。

符合 CFDA GxP 法规和 FDA 21 CFR Part11 要求的易谱™ 色谱工作站。

清博华科技产品提供多种外观尺寸和开源计算机反控通讯协议，便于设备集成整合和第三方软件控制。

清博华科技持续保持领先的研发投入和能力，为色谱领域提供更好的产品和解决方案。

Beijing QingBoHua Technologies Co., Ltd. focuses on the development and manufacturing core modules of liquid chromatography. Our products cover High Pressure and Middle Pressure LC pumps, LC Detectors, Fraction Collectors and Chromatography Workstation. All those products have been widely adopted by many instrument manufacturers for analytical LC (HPLC), ion chromatography (IC), high pressure preparative LC (Prep-LC), and flash LC.

We provide multiple choices and total solutions for common and specific applications. We not only offer LC pumps with various flow rate, but also have multiple options of pump head materials, which include Stainless Steel, Titanium Alloy, Hastelloy Alloy, PEEK, PTFE and PCTFE.

For peak detection, we manufacture various types of detectors which include universal UV detector, optical fiber detector and fixed wavelength LED detector.

For preparative systems, we provided the two kinds of fraction collectors, semi-preparative fraction collector & preparative collection valve, for different application scenarios.

All of our products provide a variety of dimensions and open source communication protocols, which facilitates system integration and software development.

QingBoHua Technologies perseveres in the development and optimization of chromatographic technologies. We act as a dedicated OEM vendor to provide better products and solutions for you and grow together with your company!

高压输液泵系列 LC Pumps

多种材质的泵头	>>>	Pump Head
10mL mini 分析型高压输液泵	>>>	10ml mini High Pressure Pump, Analytic
10mL 分析型高压输液泵	>>>	10ml High Pressure Pump, Analytic
50mL 半制备型高压输液泵	>>>	50ml High Pressure Pump semi-Preparative
100mL 制备型高压输液泵	>>>	100ml High Pressure Pump, Preparative
200mL 制备型高压输液泵	>>>	200ml High Pressure Pump, Preparative
300mL 制备型高压输液泵	>>>	300ml High Pressure Pump, Preparative
600mL 制备型高压输液泵	>>>	600ml High Pressure Pump, Preparative
1000mL 制备型高压输液泵	>>>	1000ml High Pressure Pump, Preparative
3000mL 制备型高压输液泵	>>>	3000ml High Pressure Pump, Preparative
10mL 单柱塞高压输液泵	>>>	10ml Single Piston High Pressure Pump
200mL 单柱塞输液泵	>>>	200mL Single Piston Middle Pressure Pump

检测器 LC Detectors

VWD 检测器	>>>	Variable Wavelength Detector
LED 单波长紫外检测器	>>>	Fixed Wavelength LED Detector

馏分收集器 Fraction Collectors

机械臂式馏分收集器	>>>	Preparation Fraction Collector
制备型收集阀	>>>	Preparative Collection Valve

易谱™ 色谱工作站 Chromatography Workstation

易谱™ 色谱工作站	>>>	easyChrom™ Chromatography Workstation
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高压输液泵 LC Pumps

适应不同工作环境的泵头材质
Suitable for different working environment pump head material.

满足不同工作需求的流量范围
Meet the flow range of different job requirements.

面对不同工作压力的耐压配置
Pressure - resistant configuration for different work pressures.

不同材质的泵头，扩展液相色谱更广的应用领域：

316L 不锈钢泵头	标准配置，通用型泵头。
C276 哈氏合金泵头	耐氯，耐酸（硫酸、盐酸），耐氧化性盐。
TA2 钛合金泵头	耐氯，耐氧化，耐腐蚀。
PCTFE 泵头	耐低温，耐各种酸，碱，油类及大部分有机溶剂。
PTFE 泵头	耐大部分酸，碱及有机溶剂。
PEEK 泵头	耐大部分酸，碱及有机溶剂。

Different materials of the pump head, extended liquid chromatography more widely used in the different application areas.

316L Stainless Steel	>>>	Standard Configuration, Universal Module
C276 Hadtelloy Alloy	>>>	Resistance to Chlorine, Acid (as Sulfuric acid, Hydrochloric acid) and Oxidizing Salts.
TA2 Titanium Alloy	>>>	Resistance to Chlorine, Oxidation and Corrosion.
PCTFE	>>>	Polychlorotrifluoroethylene, Resistance to Low temperature, Acid, Alkali, Oil and the most of Organic Solvents.
PTFE	>>>	Polytetrafluoroethylene, Resistance to the most of Acid, Alkali and Organic Solvents.
PEEK	>>>	Polyether ether ketone, Resistance to the most Acid, Alkali and Organic Solvents.

多种材质的泵头

Various material pump head

Stainless Steel Pump Head (SS)

Standard Configuration and Universal Pump Head
Suitable for the most of application



PEEK 泵头 PEEK Pump Head

理想的生物相容性和金属溶出控制

Ideal biocompatibility and metal dissolution control
适用于：生化分析、环境监测、反应装置、离子色谱
Suitable for the Biochemical analysis, Environmental monitoring, Reaction vessel, Ion chromatography



全 PCTFE 泵头 PCTFC Pump Head (PCTFE)

极限的化学环境耐受性

Extreme Chemical Environmental Tolerance
适用于：化工输液、微反应器及强酸、强碱和强氧化有机溶剂环境
Suitable for Chemical Liquid Delivery, Micro Reactor, and Strong Acid, Strong alkali, and Strong oxidized organic solvent environment



钛合金泵头 Titanium Alloy Pump Head (TI)

耐受性能与生物相容性完美平衡

Tolerance can be perfectly balanced with biocompatibility
适用于：生化分析中的耐高压用途
Suitable for High pressure application in biochemical analysis



哈氏合金泵头 Hastelloy Alloy Pump Head (HC)

苛刻溶剂条件下的可靠耐压能力

Reliable pressure resistance under harsh solvent conditions
适用于：化工输液领域中耐高压用途
Suitable for the High pressure application at the chemical infusion field

10mL mini 分析型高压输液泵

10ml mini High Pressure Pump, Analytic

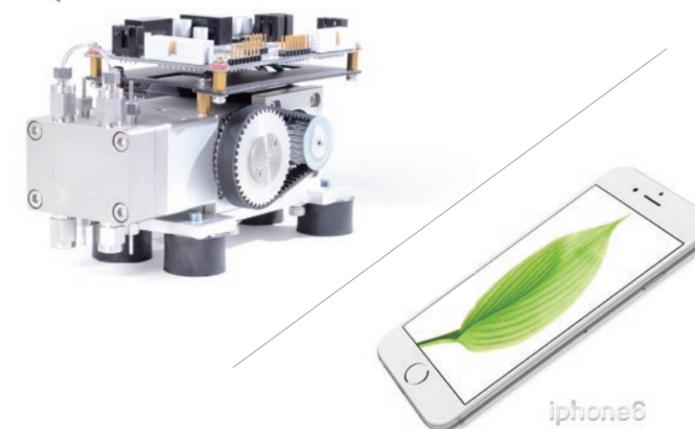
特点：

仅占用约 100cm² 的面积
集成整合更加灵活

PUD0010

Features

- Only 100 cm², smaller than the iPhone 6
- Compact design, configuration more flexible



泵强不在大，见微知著
A strong heart in a slim figure

型号 Model	PUD0010
外形尺寸 Size	147x70x85 mm (LxWxH)
流量范围 Flow Range	0.001 ~ 9.999 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 42 MPa (6,000psi)
流量精度 Flow accuracy	± 0.5%
流量稳定性 Flow Stability	≤ 0.1% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢，可选 PEEK，钛合金，哈氏合金，全 PCTFE Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy, Hastelloy Alloy, PTFE or PCTFE

10mL 分析型高压输液泵

10ml High Pressure Pump, Analytic

PUC0010

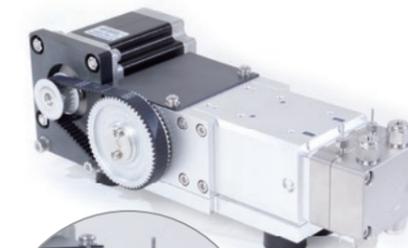


型号 Model	PUC0010
外形尺寸 Size	204x81x67 mm (LxWxH)
流量范围 Flow Range	0.001 ~ 9.999 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 42 MPa (6,000psi)
流量精度 Flow accuracy	± 0.5%
流量稳定性 Flow Stability	≤ 0.1% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金, 全 PCTFE Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy, Hadtelloy Alloy, PTFE or PCTFE

100mL 制备型高压输液泵

100ml High Pressure Pump, Preparative

PUC0100



型号 Model	PUC0100
外形尺寸 Size	254x102x101 mm (LxWxH)
流量范围 Flow Range	0.01 ~ 99.99 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 20 MPa (2,900psi)
流量精度 Flow accuracy	± 1%
流量稳定性 Flow Stability	≤ 0.3% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金, 全 PCTFE Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy, Hadtelloy Alloy, PTFE or PCTFE

50mL 半制备型高压输液泵

50ml High Pressure Pump, semi-Preparative

PUC0050

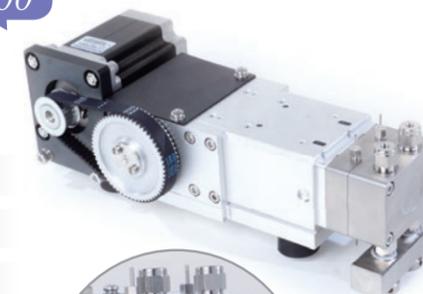


型号 Model	PUC0050
外形尺寸 Size	225x100x89 mm (LxWxH)
流量范围 Flow Range	0.01 ~ 50.00 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 30 MPa (4,350psi)
流量精度 Flow accuracy	± 0.5%
流量稳定性 Flow Stability	≤ 0.3% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金, 全 PCTFE Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy, Hadtelloy Alloy, PTFE or PCTFE

200mL 制备型高压输液泵

200ml High Pressure Pump, Preparative

PUC0200

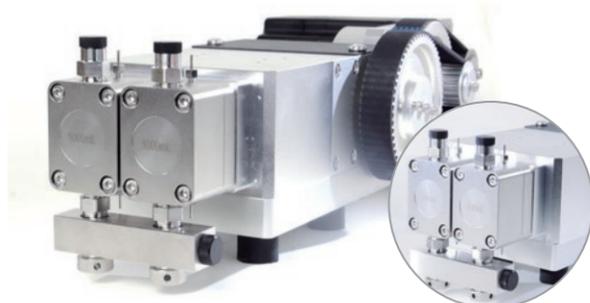


型号 Model	PUC0200
外形尺寸 Size	254x102x101 mm (LxWxH)
流量范围 Flow Range	0.01 ~ 199.99 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 10 MPa (1,450psi)
流量精度 Flow accuracy	± 1%
流量稳定性 Flow Stability	≤ 0.3% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金 Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy or Hadtelloy Alloy.

300mL/600mL/1000mL 制备型高压输液泵

300ml/600ml/1000ml High Pressure Pump, Preparative

型号 Model	PUC0300	PUC0600	PUC1000
外形尺寸 Size	440x196x127 mm (LxWxH)		
流量范围 Flow Range	0.01 ~ 299.99 ml/min	0.01 ~ 599.99 ml/min	0.01 ~ 999.99 ml/min
工作模式 Working Mode	双柱塞并联 Double Piston Series Design		
压力范围 Pressure Range	≤ 15 MPa (2,200psi)	≤ 10 MPa (1,500psi)	
流量精度 Flow accuracy	± 1%	±1%	
流量稳定性 Flow Stability	≤ 0.5%	≤0.5%	
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金 Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy or Hadtelloy Alloy.		



3000mL 制备型高压输液

3000ml High Pressure Pump, Preparative

型号 Model	PUC3000
外形尺寸 Size	632x312x191 mm (LxWxH)
流量范围 Flow Range	0.1 ~ 3,000.0 ml/min
工作模式 Working Mode	双柱塞串联 Double Piston Series Design
压力范围 Pressure Range	≤ 10 MPa (1,500psi)
流量精度 Flow accuracy	± 1.5%
流量稳定性 Flow Stability	≤ 0.1% (RSD)
泵头材质 Pump Head Materials	标配 316L 不锈钢, 可选 PEEK, 钛合金, 哈氏合金 Stainless Steel 316L, as standard. Option: PEEK, Titanium Alloy or Hadtelloy Alloy.

PUC3000



10mL 单柱塞高压输液泵

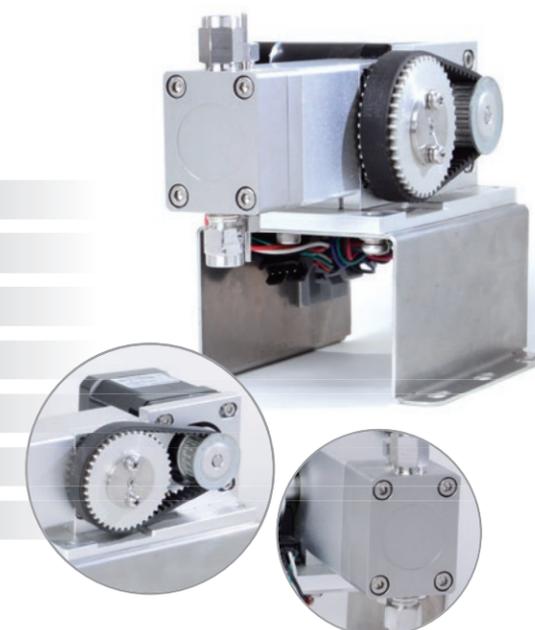
10ml Single Piston High Pressure Pump

紧凑灵活, 为便携系统而瘦身

Compact and smart, sharpened for portable systems

型号 Model	PUA0010
外形尺寸 Size	135x82x94 mm (LxWxH)
流量范围 Flow Range	0.01 ~ 199.99 ml/min
工作模式 Working Mode	单柱塞 Single Piston Pump
压力范围 Pressure Range	≤ 42 MPa (6,000psi)
流量精度 Flow accuracy	± 0.5%
流量稳定性 Flow Stability	≤ 0.1% (RSD)

PUA0010



200mL 单柱塞输液泵

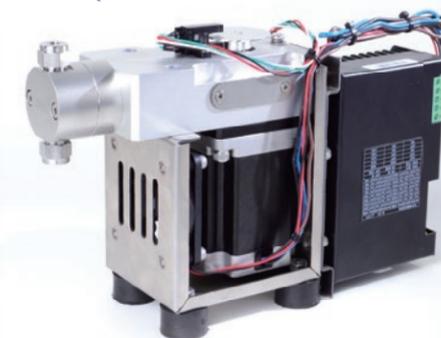
200mL Single Piston Middle Pressure Pump

强韧可靠, 为中压制备而优化

Robust and reliable, optimized for flash chromatography

型号 Model	PUA0200
外形尺寸 Size	232x76x153 mm (LxWxH)
流量范围 Flow Range	0.01 ~ 199.99 ml/min
工作模式 Working Mode	单柱塞 Single Piston Pump
压力范围 Pressure Range	≤ 2 MPa (290psi)
流量精度 Flow accuracy	± 1%
流量稳定性 Flow Stability	≤ 0.3% (RSD)

PUA0200



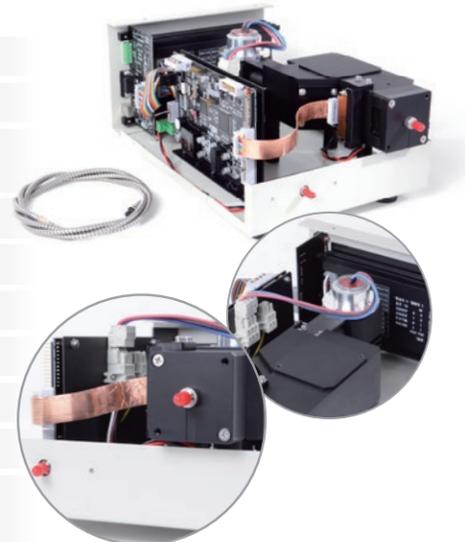
检测器 Detectors

VWD 检测器

Variable Wavelength Detector

DUV1000

型号 Model	DUV1000
外形尺寸 Size	294x200x125 mm (LxWxH)
波长范围 Wavelength Range	190 ~ 400 nm(氙灯 D2)/ 190 ~ 700 nm(氙灯 / 钨灯 D2/Wu)
波长精度 Accuracy	± 1nm
波长重现性 Repeatability	0.2nm
检测范围 Detecting Range	0 ~ 3AU
基线噪声 Base Noise	1x10 ⁻⁵ AU/h
基线漂移 Base Drifting	1.5x10 ⁻⁴ /AU
带宽 Spectral Bandwidth	8 nm
扩展 Mode Expansion	可外接光纤, 实现远程检测。 Optic fiber mode (UV-1000)



LED 单波长紫外检测器

Fixed Wavelength LED Detector

DUL1000

型号 Model	DUL1000
外形尺寸 Size	97x55x55 mm (LxWxH)
波长范围 Wavelength Range	200 ~ 700 nm (可选单波长 any wavelength)
波长精度 Accuracy	± 1nm
波长重现性 Repeatability	0.2nm
检测范围 Detecting Range	0 ~ 3AU
基线噪声 Base Noise	1x10 ⁻⁵ AU/h
基线漂移 Base Drifting	1.5x10 ⁻⁴ /AU
带宽 Spectral Bandwidth	8 nm



馏分收集器 Fraction Collectors

机械臂式馏分收集器

Automatic Fraction Collector

SCM-1000

- 适合于复杂组分的制备, 可配合分析液相, 精准制备高纯度物质;
 - 旋转机械臂设计, 体积小, 维护成本低;
 - 直观可视的控制软件;
 - 多种试管体积设置, 满足不同收集体积的需求。
- Suitable for the preparation of complex components can be used to analyze liquid chromatography, accurately prepare high purity substances
 - Rotating mechanical arm design, small volume, low maintenance cost
 - Simple and visual control software
 - Various of tube or centrifugal tube volume setting to meet the requirements of different collection volumes

型号 Model	SCM1000
外形尺寸 Size	350x240x320 mm (LxWxH)
流量范围 Flow Range	0 ~ 100 ml/min
波长精度 Accuracy	± 1nm
收集模式 Collection Mode	手动 / 自动 Manual/Automatic
收集条件 Collection Condition	时间 / 阈值 / 斜率 Time/Threshold/Slope
样品量 Sample Capability	120 支 (15x150mm, 15mL 玻璃管) 120 Tube, 15mL (Φ15x150mm)
	120 支 (16x120mm, 15mL 离心管) 120 Centrifuge Tube, 15mL (Φ16x120mm)
	42 支 (28x105mm, 50mL 离心管) 42 Centrifuge Tube, 50mL (Φ28x105mm)



制备型收集阀

Preparative Collection Valve

SCV-1000

采用阀切换技术, 配合制备色谱, 实现大体积、自定义馏分收集
The valve switching technology is used to prepare the high volume and custom distillates

型号 Model	SCV-1000
外形尺寸 Size	163x62.5x88 mm (LxWxH)
流量范围 Flow Range	0 ~ 600 ml/min
样品通量 Sample Channel	5 路 (单阀) / 11 路 (主 & 副阀) 5 (main)/11
收集模式 Collection Mode	手动 / 自动 Manual/Automatic
收集条件 Collection Condition	时间 / 阈值 / 斜率 Time/Threshold/Slope



易谱™ 色谱工作站 easyChrom™ Chromatography Workstation

简洁易用的硬件控制与数据采集

Simple and Easy to use Hardware Control and Data Acquisition

可视化的参数设置界面，一目了然的实时运行数据显示。

Visual parameters setting interface, a clear real-time running data display



领先的分析算法

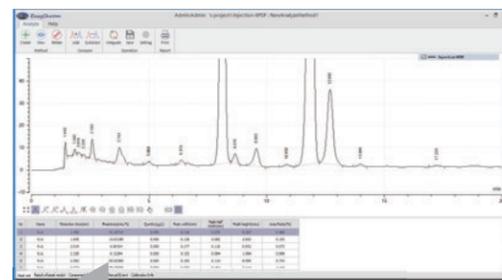
Leading Analysis Algorithm

- 高效可靠的经典积分算法，可处理极端分离状况的谱图。
- 直观高效图形化的自定义积分事件处理。
- 支持“负峰”、“判峰”、“阈值”等积分事件的时间程序。

- Efficient and reliable classical integration algorithm can deal with the chromatogram of extreme separation
- Intuitive and efficient graphical self-define integration event processing
- Support the time program of "Negative Peak", "Searching Peak" and "Threshold Value".

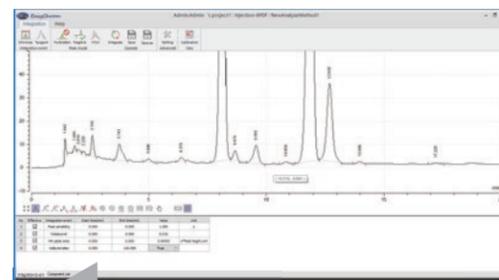
复杂色谱图的积分

Complex Chromatogram Integration



自定义积分事件处理

Self-Define Integration Event Processing



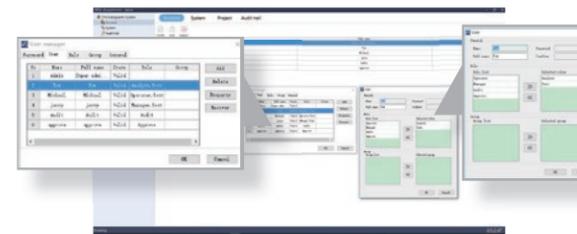
符合法规要求

Compliance with Various Regulatory Requirements

- 严格的权限管理、电子记录、电子签名、审计追踪功能，执行用户注册和多种权限设定方式。
- 完全符合 CFDA GxP 和 FDA 21CFR Part11 法规要求。
- 基于加密数据库模式，实现谱图数据和多层次的项目管理。
- Strict authority management, electronic record, electronic signature, audit tracking function, perform user registration and multiple permission Settings.
- Fully in compliance with CFDA GxP and FDA 21CFR Part11 requirements.
- Multi-level management of projects, methods and data based on encrypted database.

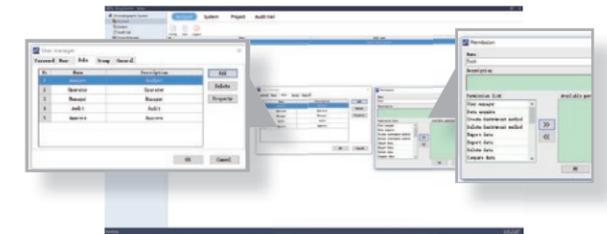
用户角色设定

User Role Setting



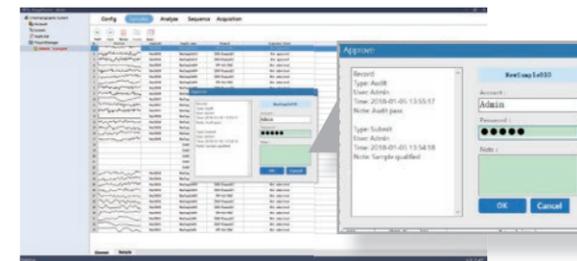
用户权限设定

User Permission Setting



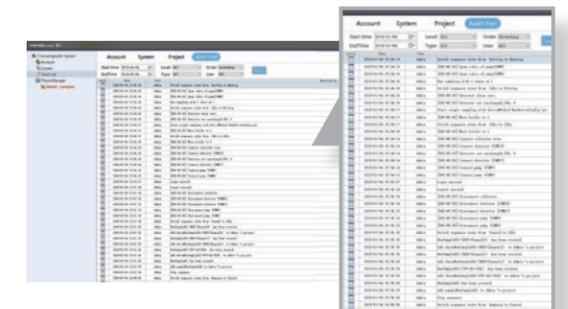
电子签名

Electronic Signature



审计追踪

Audit Tracking



灵活方便的自定义报告功能

Flexible and Convenient Customized Reporting Functions

