岳中数字科技

一体式小系统(15kg)

产品规格书

重要提示Important Notes:

1

如对产品的性能和/或寿命有任何争议，仅基于此规格书作出判断。
If there is any argument on product performance and/or life, judgment is to be made base on this specification only.

2

本文档用于限定15KG级系统的设计指标。
This document is used to limit the design indicators of 15KG-level systems.

3

在满足规格的条件下，我司可以改变零件材料、尺寸及形状来改善品质，和/或性能，和/或生产效率。
Within the limitation to satisfy this specification, Yuezhong has the convenience to change the materials, sizes and shapes of components of the product for the purpose of improving quality, and/or performance, and/or production efficiency.

4

客户方有责任确认该产品能满足您的使用要求。
Customer has the responsibility to ensure that the product can satisfy the requirement of your application.

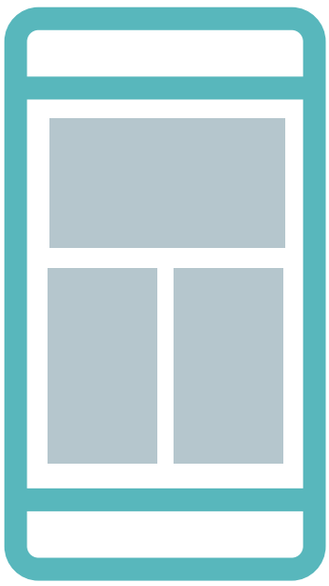
一、产品简介

15Kg级别一体式小系统最高升降速度可达1.5m/s,适用于吊挂LED屏幕，灯条，轻型灯具，激光灯等低负载产品。根据客户需求以及目标悬挂物重量，岳中提供2种不同型号的15Kg一体式小系统：单机单绳小系统，单机双绳小系统。根据项目需求选择单点，双点，三点或四点悬吊不同形状和类型的产品

The maximum lifting speed of the 15Kg integrated winch system can reach 1.5m/s, which is suitable for hanging LED screens, light bars, light lamps, laser lights and other low-load products. According to customer needs and the weight of the target suspension, Yuezhong provides two different models of 15Kg integrated small systems: single-machine single-rope winch system, single-machine double-rope winch system. Choose single-point, double-point, three-point or four-point suspension products of different shapes and types according to project requirements

二、产品系统构成

控制部分



1.伺服电机驱动

1. Servo motor drive

2.伺服电机刹车控制

2. Servo motor brake control

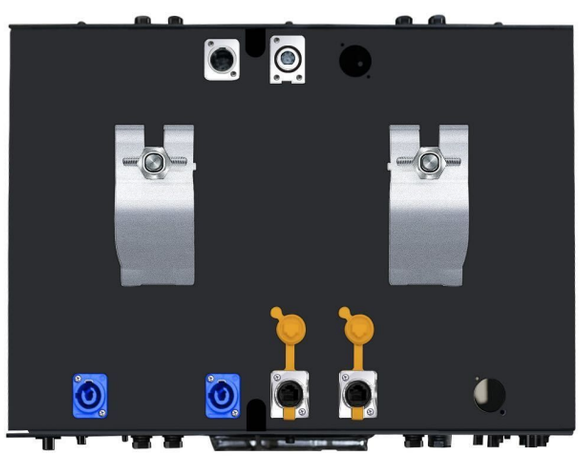
3.伺服电机刹车控制检测

3. Servo motor brake control detection

4.行程开关(部分系统包含)

4. Travel switch (included in some systems)

机械部分



1.传动装置

1. Transmission device

2.排线定位装置

2. Cable positioning device

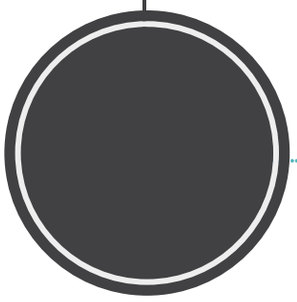
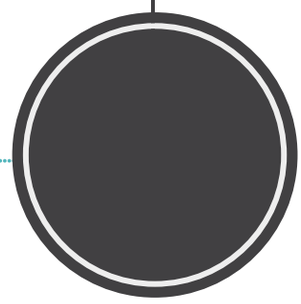
3.导电环

3. Conductive ring

4.电缆

4. Cable

三、应用场景

单机单绳小系统		单机双绳小系统
	VS	
FEATURE 滚筒离排线轮195mm 195mm from the drum to the wire wheel	特征	FEATURE 滚筒离排线轮195mm,两根电缆绳相距550mm The drum is 195mm away from the cable wheel, and the two cable ropes are 550mm apart
WEIGHT 43Kg	自重	WEIGHT 85Kg
APPLICATION 可平放或悬挂与葡萄架，单点升降或三点飘摆。单个占用尺寸为:430*300*600(加吊环为672) It can be placed flat or hung on the grape rack, single-point lifting or three-point swing. The size of a single occupation is: 430*300*600 (672 ring added)	应用方式	APPLICATION 可悬挂与葡萄架，不可悬挂，一般2个为一组用于两点飘摆。单个占用尺寸为:430*850*600(加吊环为672) Can be hung with grape racks, but cannot be hang, generally 2 as a group for two-point swing. The single occupancy size is: 430*850*600 (672 ring added)

四、系统指标

标准行程
Standard Range

7.5m

额定速度
Standard Speed

带角度0.8m/s (Swing)
不带角度1.2m/s (Without swing)

单套系统网线规格
Single set of system network cable specifications

一路超五类屏蔽网线
One Set Cat5e-STP calble

电机规格 Motor Type

750w高速总线绝对值伺服电机
750w high-speed bus absolute value servo motor

整机系统寿命
System life span

1000小时
1000Hours

单根电源电缆最大电流
Maximum current of a single power cable

4.5A （对应功率990w和220v电压）
4.5A (corresponding to power 990w and 220v

voltage)

电缆使用寿命 Cable life

电源电缆200小时
网线电缆120小时
Power cable 200 hours
Network cable 120 hours

供电电源 Power supply

只支持220V供电系统，其他规格电源需在前端配备变压器
Only supports 220V power supply system, other specifications of power supply need to be equipped with a transformer at the front end

工作温度 Operating temperature

-5~60 °c

工作湿度 Operating humidity

10%~95% 无凝露
10%~95% No condensation

防护等级 Ingress Protection Rating

IP50 防尘不防水
IP50 Dustproof (not waterproof)

防污染情况 Anti-pollution situation

可用于常规酒吧烟雾特效环境
Used in regular club

smoke special effects environment

五、安装要求

出线口滑轮调整 Outlet pulley adjustment

所有不带排线器的系统，出线滑轮要调节至行程的中心，避免偏摆角度过大造成乱绳。（假设升到最高时滚筒上的电缆有五圈，降到最低时还有一圈，则出线滑轮要调整至对准第三圈的位置）
另外，为保证电缆受力均匀，讲到最低时，电缆最少要在滚筒上预留一圈以上

For all systems without a flex cable, the outgoing pulley should be adjusted to the center of the stroke to avoid messed roped caused by excessively large yaw angles . (Assuming that the cable on the drum has five turns when it rises to the highest, and there is one turn when it drops to the lowest, the outlet pulley should be adjusted to the position of the third turn)
In addition, in order to ensure uniform force on the cable, at least one turn of the cable must be reserved on the drum when it is the lowest.

绑线方式 Binding method

网线接头处若无稳定固定装置，长时间运转后可能会出现松动。由此会引发闪屏，接触不良等现象。因此要求安装时将所有接头和网线用轧带进行固定以避免松动

If there is no stable fixing device at the network cable connector, it may become loose after long-term operation. This will cause a flicker, poor contact and other phenomena. Therefore, it is required to fix all joints and network cables with rolling belts to avoid loosening during installation.

电源以及信号线 Power and signal lines

伺服电机刹车电阻通常再机械运行时会有较大发热，因此在安装调试以及维修过程中需处理好电源和信号线的位置关系（严禁将电缆线与刹车电阻有直接接触）

Servo motor brake resistors usually generate a lot of heat during mechanical operation. Therefore, the position relationship between the power supply and the signal line must be handled in the installation, debugging and maintenance process (it is strictly forbidden to directly contact the cable and the brake resistor)

精密元件 Precision components

在电机尾端的伺服电机编码器属于精密器件，相关人员在装配以及售后过程中不得使用硬物直接敲击电机尾端以及电机轴部位。由于暴力安装和使用不当造成的损失不在本公司的保修范围内

The servo motor encoder at the end of the motor is a precision device, and relevant personnel are not allowed to directly hit the end of the motor and the motor shaft with hard objects during assembly and after-sales. Losses caused by violent installation and improper use are not covered by our company's warranty

线缆整理 Cable organization

安装调试人员需将所有电源线，信号线（网线及伺服控制线），电机配线（电机动力线及编码器线）在操作完成后整理并固定好，避免线缆松

动影响机械正常运行

Installation personnel must arrange and fix all power cables, signal cables (network cables and servo control cables), and motor wiring (motor power cables and encoder cables) after the operation is completed to avoid loose cables that affect the normal operation of the machine

负载 Load

对于低负载系统（低于五公斤），需要额外增加配种（总重量大于十公斤）以避免电缆出现脱轨松动问题

For low-load systems (less than five kilograms), additional breeding is required (total weight greater than ten kilograms) to avoid derailment and loosening of cables

六、使用环境

01 使用容差 ALLOWABLE RANGE FOR USE

注意电压及电流的使用范围，并且在本标准规定情况下使用电机，否则将相应降低电机的使用寿命和性能

Pay attention to the use range of voltage and current, and use the motor under the conditions specified in this standard, otherwise the service life and performance of the motor will be reduced accordingly

02 储存 STORAGE

避免放置在高温、潮湿的环境中。需要定期进行除尘处理，避免由于灰尘造成的产品故障

Avoid placing it in a high temperature and humid environment. Dust removal is required on a regular basis to avoid product failure due to dust

03 危险环境 HAZARDOUS ENVIRONMENTS

我司电机在正常环境中的防护能力是符合要求的，但机体会受到湿气较大，漏水现象，灰尘较大以及高温的影响，因此未经咨询请不要在腐蚀/高温/潮湿的环境中储存或使用产品。

The protection ability of our motor in a normal environment meets the requirements, but the body will be affected by high humidity, water leakage, large dust and high temperature, so please do not use or store it in a corrosive / high temperature / humid environment without consulting