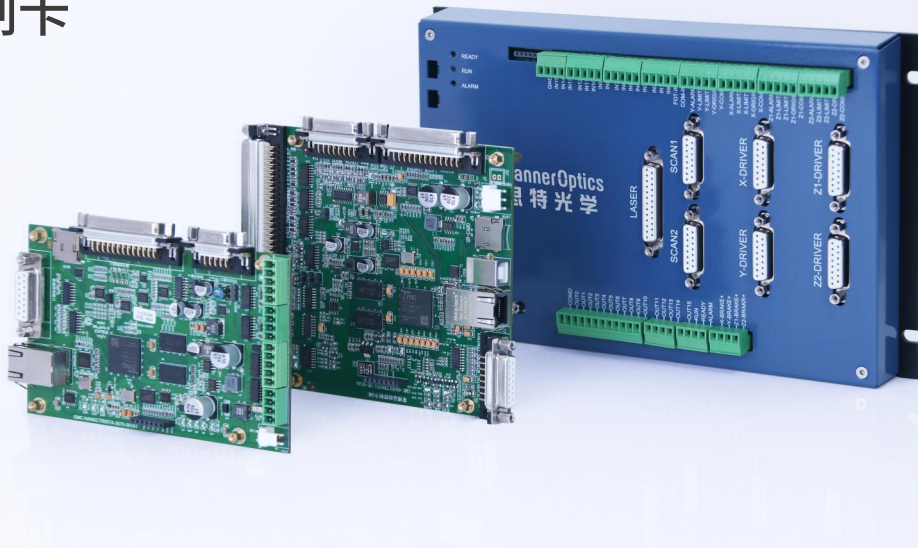


GMC CONTROLLER

GMC控制卡



产品简介

PRODUCT INTRODUCTION

思特光学GMC控制卡兼具高精度, 高分辨率, 功能强大, 易于集成等特点, 各种强大的功能可以协助客户完成各种富有挑战的工作, 包括20bit的ST2-100通讯协议、Skywriting轨迹优化功能、位置闭环功能、状态监测功能以及温度监测功能等。高精度校正算法保证大幅面加工时的定位精度; 提供C#/C++二次开发库, 兼容32位/64位的各种windows操作系统, 方便客户灵活开发上位机软件。

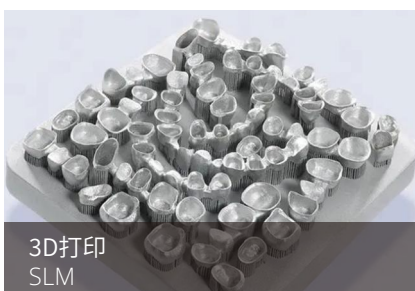
GMC controller combines high precision, high resolution, and powerful functionality, while being easy to integrate. Various powerful functions can help customers complete a variety of challenging tasks, including the 20bit ST2-100 communication protocol, Skywriting trajectory optimization, position feedback loop, status and temperature monitoring. High-precision calibration algorithm ensures the positioning accuracy in large field machining. The product provides C#/C++ secondary development library, which compatible with 32bit/64bit Windows operating system for flexible development of host computer software.

行业应用

INDUSTRY APPLICATIONS

思特光学GMC控制卡主要应用于医疗、通用打标、2D&3D激光加工、高功率焊接、光伏、3D打印、转镜扫描、飞切、四轴联动等激光加工领域。

GMC controller is mainly used in medical, general marking, 2D&3D laser processing, high power welding, photovoltaic, 3D printing, rotating mirror scanning, flying cutting, four-axis linkage and other laser processing fields.



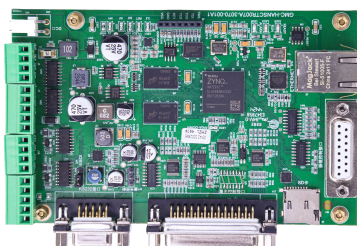
3D打印
SLM



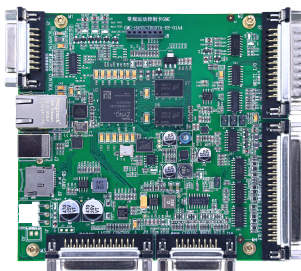
光伏
Photovoltaic



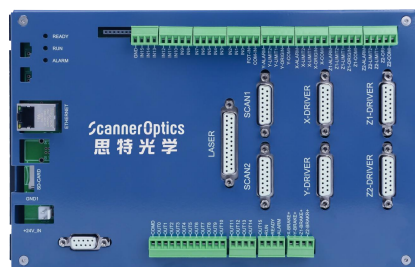
锂电池焊接
Lithium Battery Welding



A3



A4



A5

技术参数

TECHNICAL PARAMETERS

	A3	A4	A5
工作电源 Working power supply	15V - 24V, 3A	15V - 24V, 3A	15V - 24V, 3A
通信协议 Protocol	XY2-100 / ST2-100	XY2-100 / ST2-100	XY2-100 / ST2-100
方头数量 Scan Head quantity	2D方头 x1 2D Scan Head x1	2D方头 x2 / 3D方头 x1 2D Scan Head x1	2D方头 x2 2D Scan Head x2
通讯方式 Communication mode	以太网 / 串口通信 Ethernet / Serial communication	以太网 Ethernet	以太网 Ethernet
控制伺服电机数量 Control the number of servo motors	—	1	4
连接屏幕控制 Connect screen control	√	—	—
动态聚焦Z轴控制 Dynamic Focus Module control	—	√	—
Skywriting Skywriting	√	√	√
RS-232 RS-232	√	√	√
最多连接控制卡数量 ^① Max. No. of controllers	252	252	252
激光控制信号 Laser control signal	2路 0-10V模拟量 2 channels 0-10V analog 5V激光控制电压 5V laser control voltage	2路 0-10V模拟量, 功率波形编辑 2 channels 0-10V analog, Power waveform editing 5V / 24V激光控制电压 5V / 24V laser control voltage	2路 0-10V模拟量 2 channels 0-10V analog 5V激光控制电压 5V laser control voltage
支持激光器类型 Supported laser types	脉冲光纤激光器 / 高功率连续激光器 / CO ₂ / 超快激光器等 Pulsed fiber laser / high power continuous laser / CO ₂ / ultrafast laser, etc.		
旋转电机 Rotary motor	—	√	—
脱机打标 Off-line marking	√	√	√
IO I/O	8路输入 / 8路输出 8 inputs / 8 outputs 5V / 24V, 500mA输出 5V / 24V, 500mA output	16路输入 / 16路输出 16 inputs / 16 outputs 5V / 24V, 500mA输出 5V / 24V, 500mA output	16路输入 / 16路输出 16 inputs / 16 outputs 5V / 24V, 500mA输出 5V / 24V, 500mA output
振镜反馈 ^② Galvanometer feedback	√	√	√
外加SD卡 Additional SD card	√	√	√
系统要求 System requirement	Windows 10 / 8 / 7 (32bit & 64bit)		
应用接口 Application interface	ScanWorld打标软件 / ScanWorld API (支持C++和C#开发环境) ScanWorld Marking Software / ScanWorld API (supports C++ and C# development environments)		

① 单台振镜通过交换机最多可连接的控制卡数量。

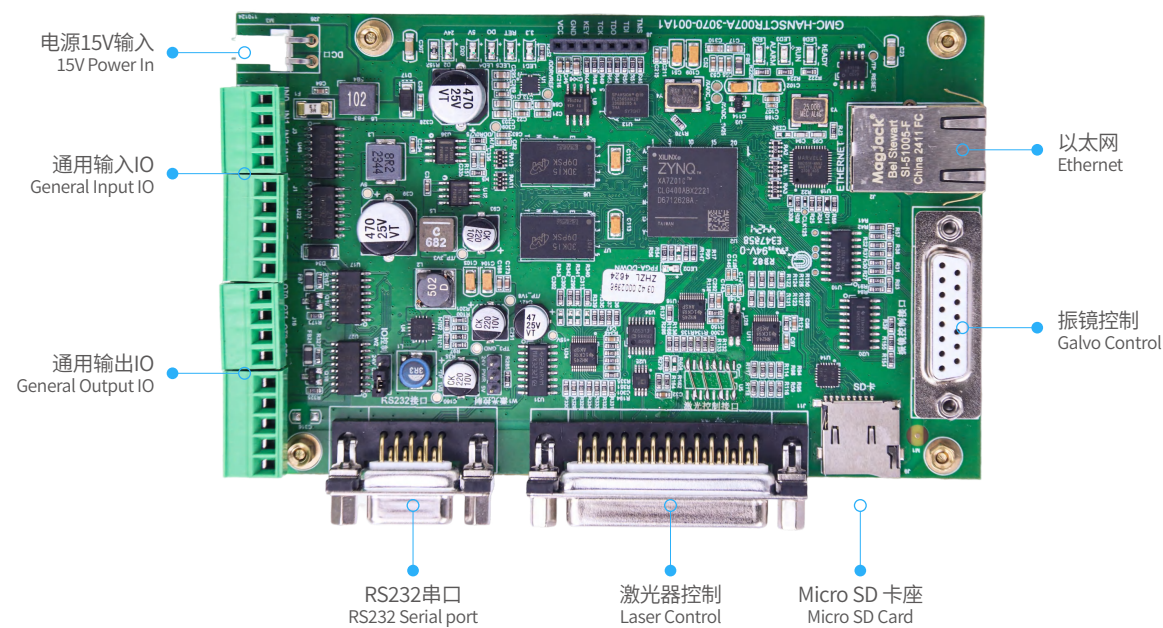
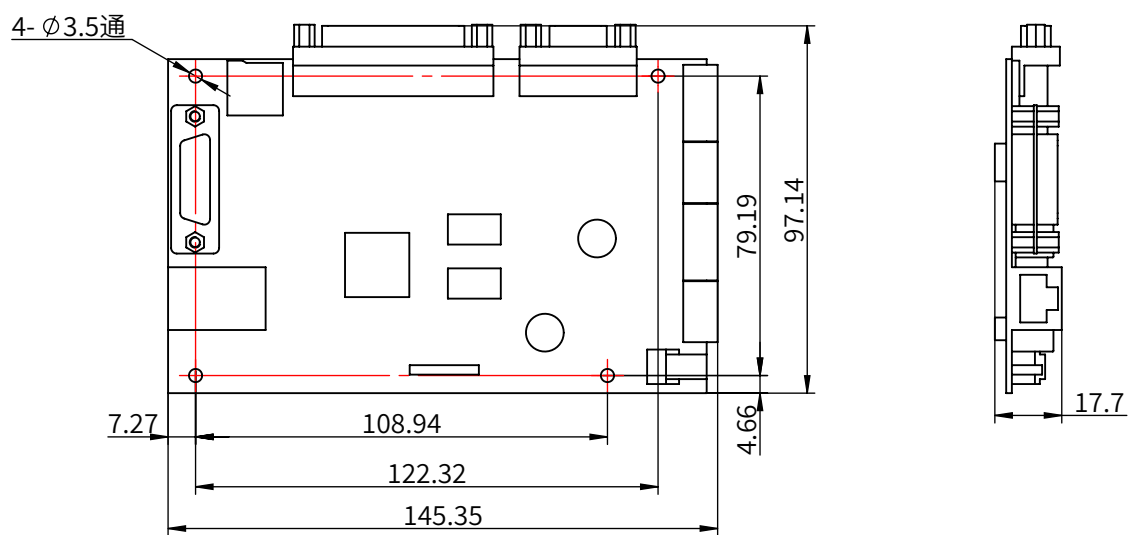
The maximum number of controller that can be connected to a single galvanometer through a switch.

② 反馈内容包含：X位置反馈、Y位置反馈、初始化找零报警、过流闪报警、编码器错误报警。

The feedback includes: X position feedback、Y position feedback、Initialization alarm、Overcurrent alarm、Encoder error alarm.

外形尺寸图
TECHNICAL DRAWING

A3

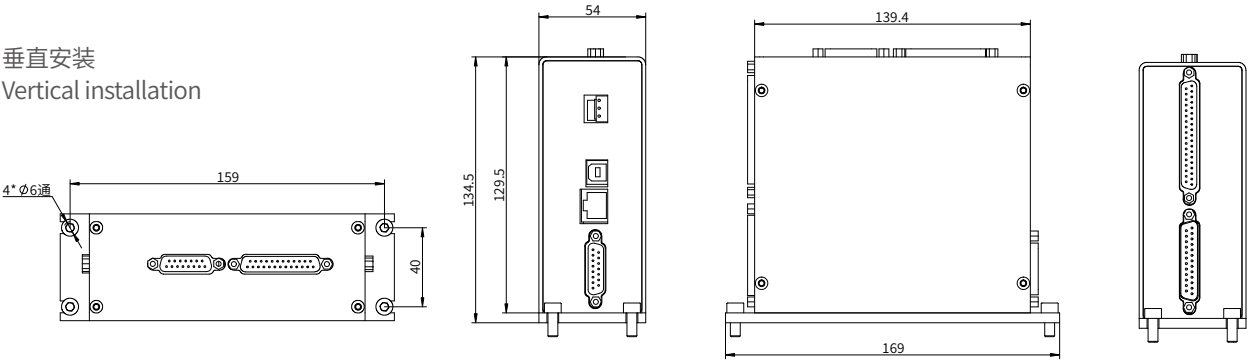


外形尺寸图

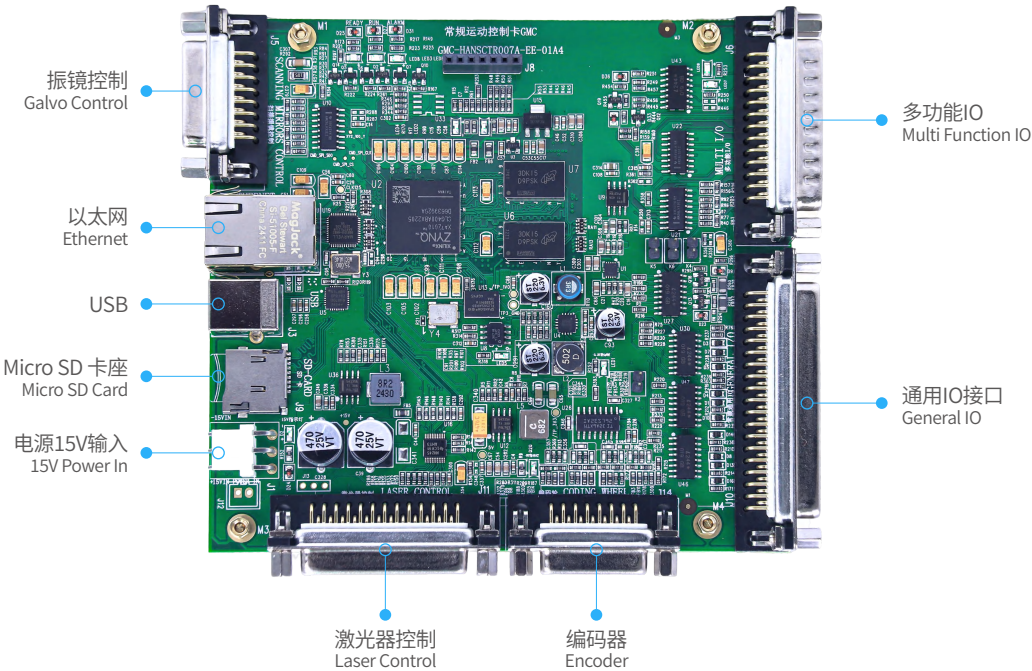
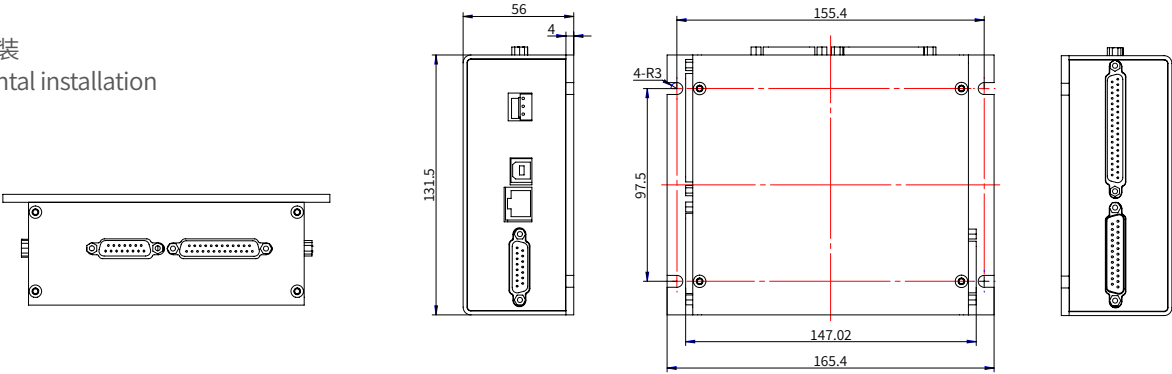
TECHNICAL DRAWING

A4

垂直安装
Vertical installation

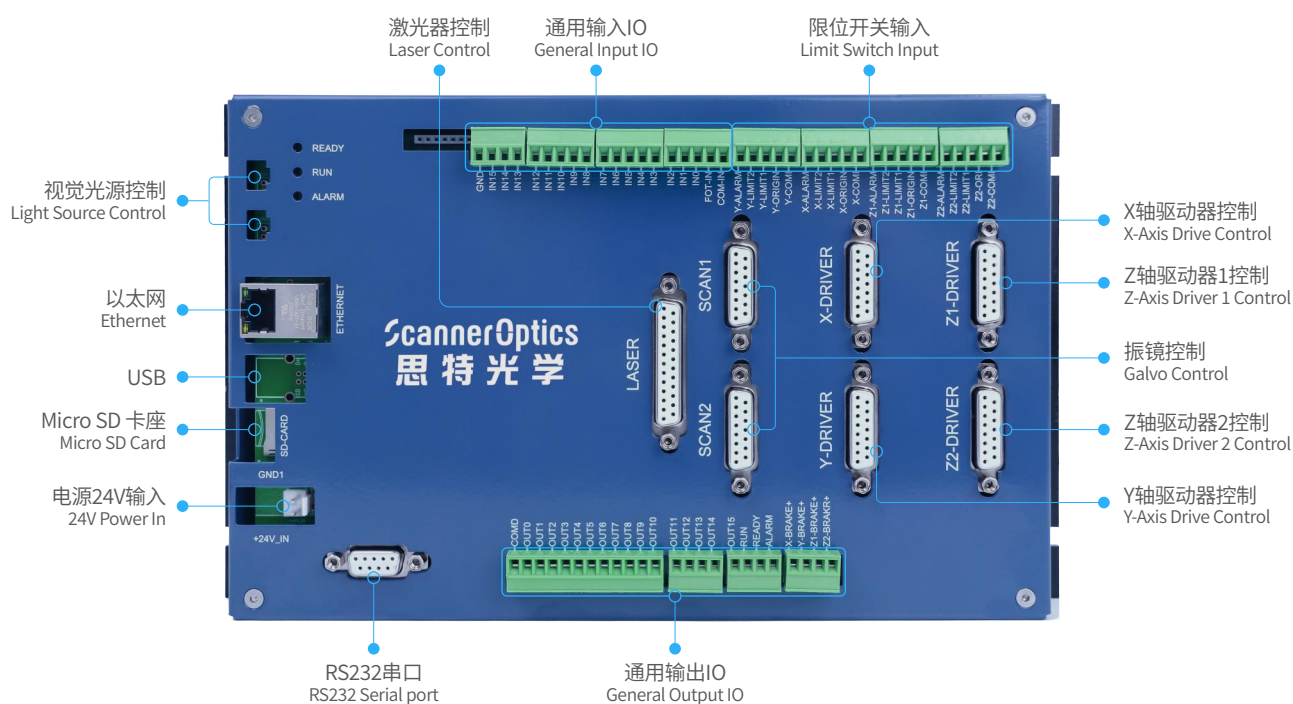
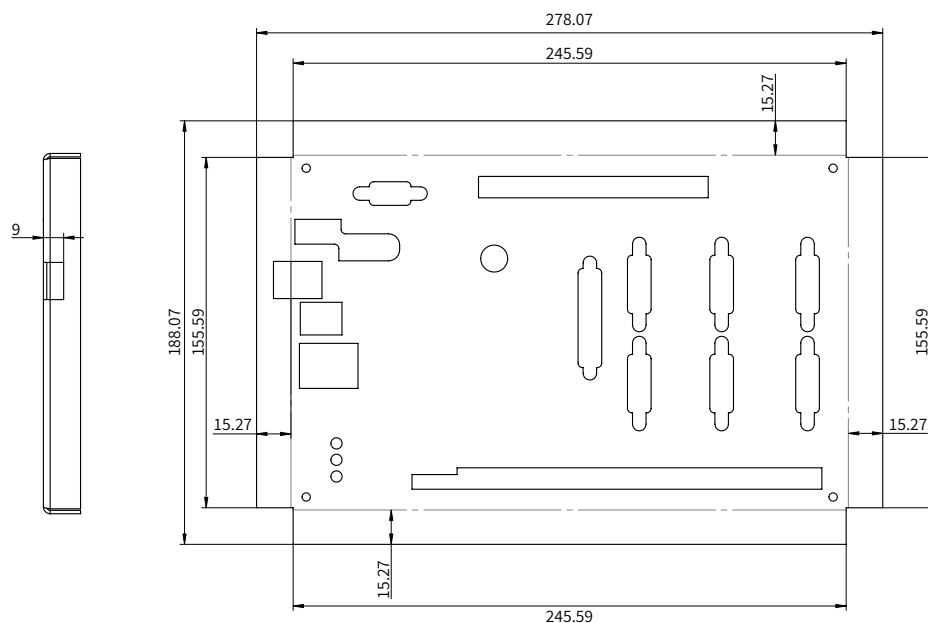


水平安装
Horizontal installation



TECHNICAL DRAWING

A5



ScannerOptics 思特光学

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