QS-DS-PhysLogger-22-A

Datasheet

Qosain Scientific PhysLogger

Introduction:

PhysLogger is a family of hardware devices and software tools that can measure and control a range of physical quantities— letting you fully discover the underlying scientific concepts of experiments without getting lost in mundane or difficult steps!

Features:

- Plug and play hardware
- Compatible with 15 sensors and instruments
- USB C connections
- Modular and scalable
- Can interconnect to form a chain of PhysLoggers
- Highly intuitive
- Requires no programming skills
- Lightweight application
- Freedom to create your own interface or use templates
- Self-guided tours
- Automatic updates

Specifications:

- Electrical
  - Maximum sampling rate (single channel): 20kHz
  - Analog input resolution: 12 bits
  - Analog output resolution: 10 bits
  - Input impedance: > 10MOhms
  - Output impedance: 1 kΩ
  - Input power: < 2 W
- General
  - Analog input Channels: 4
  - Digital input channels: 4 + 100
  - Colors: Translucent green, Translucent pine

- Regulated power sources: 12V (80 mA maximum, -12V (10 mA maximum, +5V (80 mA maximum
- Mechanical
  - Main I/O connector: (2 + 4 + 4 + 4 + 4) pluggable screw terminals
  - Channel connections: USB C style reversible connectors
  - USB version: 2.0
  - Weight: 97 g
  - Dimensions: 73.7 x 95.8 x 15.5 mm SLA printed res stainless steel
  - Cooling: Natural

Typical Applications

- Measure and graph quantities accurately and quickly in real time over a wide range
- Create independent measuring and controlling systems
- Signal generation
- Control motor rotation and fluid pumping
- Temperature control units
- Cloud-based remote sensing and logging
- PID Controlling
- Create independent measuring and controlling interfaces

Resources

- Instrument URL: www.physlogger.com
- Discussion: www.community.physlogger.com/c/physlogger/0036