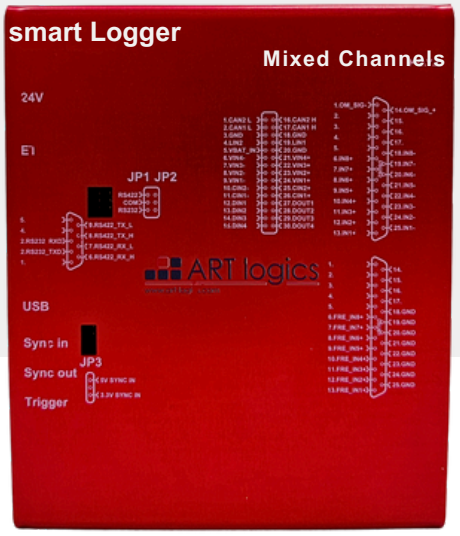
www.art-logics.com
support@art-logics.com

Smart Logger
Mixed Channels



OVERVIEW

ART Logics' Mixed Channel Logger offers complete flexibility in sampling configurations, allowing any combination of measurement types (voltage, current, frequency, temperature) at different sampling speeds across the available channels. Unlike fixed-speed loggers, the mixed channel logger supports custom channel allocation with selectable sampling speeds of 100 kHz, 2 MHz, 4 MHz, and 10 MHz — all in a single system."The Mixed channels Fast Sampling Product offers voltage, current and frequency measurement channels. It supports a wide range of programmable configuration parameters for each input channel, for example the sampling rate, the total period of acquisition, the trigger option, etc.

The user has the option to use the Ethernet TCP, USB-C or RS-232 as a communication interface to set the configuration of the channels and get the measurement data. In addition, The Mixed channels Fast Sampling Product is able to run in a standalone mode with the built in SD Card.

A typical configuration can include 1 channel at 10 MHz, 8 channels at 4 MHz, and 8 channels at 1 MHz, fully customized based on application needs.

KEY FEATURES

- Support for 100kHz, 1MHz, 2MHz, 4MHz, and 10MHz sampling rates Mix-and-match sampling speeds per channel in a single logger
- Each channel can be configured independently as:Voltage input, Current input,Frequency input,Temperature input.
- Ethernet TCP, USB-C and RS-232 communication interfaces.
- Software defined and external trigger signals support. Ready to use C# and LabVIEW APIs.
- External clock reference for synchronization. Built in SD Card to store results.

DIMENSION

L*W*H = 200mm*145mm*54mm.

OPERATING TEMPERATURE

10 ˚C ~ 35 ˚C

POWER REQUIREMENT

DC power supply:
24 VDC, 90mA

DETAIL SPECIFICATIONS:

Each channel can be configured for any measurement type and sampling rate independently, enabling full system flexibility.

Channel Type	Sampling Speeds	Resolution	Accuracy	Input Resistance	Input Range	Synchronization	Trigger	Input Voltage Threshold	Input Frequency Range
Voltage Input	100kHz / 2MHz / 4MHz / 10MHz	16bits	± 0.5%	220 kΩ (Differential)	±15 V	100 kHz clock input	Rising/Falling edge digital input		
Current Input	100kHz / 2MHz / 4MHz / 10MHz	16bits	± 0.5%	220 kΩ (Differential)	±40 mV	100 kHz clock input	Rising/Falling edge digital input		
Frequency&Counter Input				100 KΩ				-19/+19 V	0 to 100 kHz

CHANNEL & SPPED CONFIGURATIONS:

While the SU5 (100kHz), SU10 (1MHz), and SU20 (up to 10MHz) define standard fixed-speed configurations, our Mixed Channel Logger allows combining all these speeds in a single chassis. This gives users the power to build a fully customized logging system tailored to each signal's bandwidth and performance need.

SERIES:

Current measurement	SCU5-16DVCFT	SCU10-8DVCFT	SCU20-8DVCFT	SCU20/4-16DVCFT
Current measurement		✔	✔	✔
channels		8	8	16
Resolution		12	16	16
Input Resistance		220 kΩ (Differential)	220 kΩ (Differential)	220 kΩ (Differential)
Accuracy		± 0.1%	± 0.5%	± 0.5%
Sampling speed	100KHZ	1MHZ	10MHZ	4MHZ
Input Range(Normal/Max	±10 V / ±40 V	±10 V / ±40 V	±10 V / ±40 V	±10 V / ±40 V

DETAILED SPECIFICATIONS:

Communication Interface	Parameters
Ethernet	TCP/IP 10/100 Mbps link Programmable Source, Gateway and Mask IPs
USB-C	USB 2.0 5V power supply
RS-232	Programmable baud rate up to 921600 bps

ENVIRONMENTAL

The product is intended for indoor use only but may be used outdoors if installed in a suitable enclosure. Refer to the manual for more information about meeting these specifications.

Operating temperature	**10~35**
Storage temperature	**-40~+85**
Ingress protection (IP code)	**None**
Operating humidity	**10-90% RH non condensing**
Storage humidity	**5-95% RH non condensing**

DIMENSION

L*W*H = 200mm*145mm*54mm.

SUPPORT AND SERVICES

Calibration ART logics measurement hardware is calibrated to ensure measurement accuracy and verify that the device meets its published specifications. To ensure the ongoing accuracy of the measurement hardware, ART logics offers basic or detailed recalibration service.

ART logics
www.art-logics.com

ART Logics (Shanghai) Testing Equipment CO., Ltd
艾驰电子检测设备技术（上海）有限公司

Tel: 021-61075469
Room 105, No. 258, Chengjiaqiao Road,Shanghai, P.R. China

www.art-logics.com
support@art-logics.com