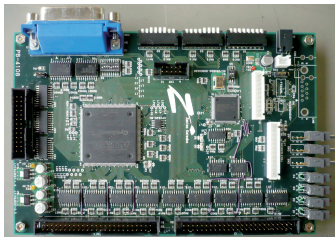

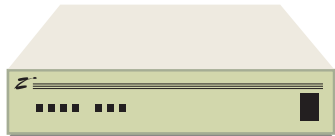


All equipment
with GP-IB function

GP-IB Adapter

ZS-6120C

The GP-IB adapter ZS-6120C can convert up to 8bytes(64 bits) of parallel I/O signals to GP-IB interface. By using the ZS-6120C, GP-IB function can be easily provided even for measuring instruments without GP-IB function.

ZS-6120CP	ZS-6120CH	ZS-6120CJ
		
Printed circuit board type	Small case built-in type	JIS rack built-in type
DC5V 0.3A 120x180x30(H)m	AC100V 20VA 215x250x60(H)mm	AC100V 20VA 430x252x49(H)mm

- There is both I/O functions with one unit.
- It is able to correspond to many signal formats.
- There are extension unit and optional unit.

GP-IB Memo

GP-IB is a standard interface bus that is convenient for configuring a relatively small-scale system by choosing a device from a minicomputer or personal computer as a controller, without being limited by the same manufacturer. For that reason, the nomenclature of the signal name, timing of operation, signal connection, connectors and cables to be used are standardized, only connecting the devices with a dedicated cable.

Please be aware that GP-IB has the following usage restrictions.

1. UP to 15 devices can be connected to one bus.
2. The length of one cable connecting devices is 4 m or less.
3. Total cable length is 20m or less.

Since there are instruments for removing such restrictions, please contact Zenisu Keisoku, Inc

Delimiter setting

Delimiters can be set with seven different combinations with DIP switches.

CR, LF, EOI, CR LF, CR + EOI, LF + EOI, CR LF + EOI

Read and Write command

There are many data read and write commands.

Data can be read and written in bit units, nibble unit(4bits), byte unit, etc. to all data batch, random place, depending on the use of commands.

Environment of usage

Temperature: 0 to 45°

Humidity: 10 to 85% RH (No Condensation)

Related items

An expansion unit is available as an option.

Expansion unit

ZS-7200P: Isolate 64-bit input/output

ZS-7211P: Convert 24-bit TTL signal to make contact

GP-IB cable

ZS-GPIB-R5: Cable length 50cm

ZS-GPIB-01: Cable length 1m

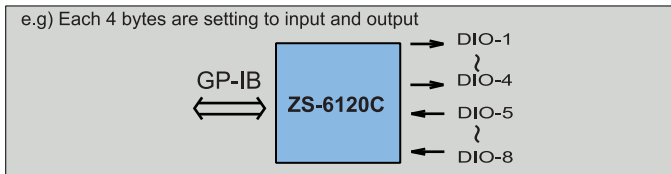
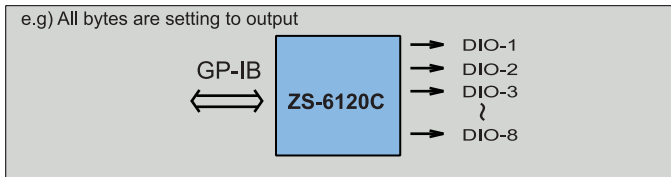
ZS-GPIB-02: Cable length 2m

ZS-GPIB-04: Cable length 4m

ZS-GPIB-08: Cable length 8m

I/O functions

ZS-6120C is possible to support parallel signals of up to 8 bytes. Depending on the setting of DIP switch, input byte and output byte can be set.



Data code

In **binary code**, transfer between parallel input/output signals in 8-bit units as they are. In **BCD code**, it is convenient for handling polarity signals and 0 to 9. In **HEX code**, convert 0 to 9 and A to F characters to 4 bit binary code. In **BCD and HEX codes**, 2 digits can be transferred with 1 byte, it is possible to use up to 16 digits.

Positive and Negative logic

It is possible to switch between positive and negative logic of input byte, output byte and control signal with DIP switch.

Operation mode

- Mode 0: Use this mode, when it does not need a strobe signal for data, such as reading the switch setting status or lighting status display lamp.
- Mode 1: The operation of starting and ending the data transfer between ZS-6120C and I/O device operates synchronously with each other.
- Mode 2: It performs SRQ signal generation and serial polling. One byte is occupied for the status signal.

Control signal

The control signals shown in the table below are prepared, so it is possible to synchronize with the connected equipment. The logic level can be switched between positive and negative.

Name	Signal		Description
	Direction	Type	
	IN	P	Switch remote state to local state. Invalid for local lockout.
REMOTE	OUT	L	A signal in a controllable state is output from the controller and the REMOTE LED also lights.
IN-READY	OUT	L	START puls is receivable.
OUT-READY	IN	L	It inputs data when the I/O device can be received data.
OUT-STROBE	OUT	P	It outputs data when all data reception is completed with the listener operation.
START	IN	P	It inputs SRQ generation and talker operation start signal. It is possible to be triggered at the edge of the pulse.
TRIGGER	OUT	P	It outputs data by GET command.
CLEAR	OUT	P	It is clear signal by DCL, SDC command.

Note) L: Level signal, P: Pulse signal

Note) IN: Input signal to ZS-6120C, OUT: Output signal from ZS-6120C

DIP switch

The following three types of DIP switches (ADDRESS, MODE, OUT/IN) are available to be set.

SW NO.	ADDRESS	MODE	OUT/IN
1	ADR-1	Delimiter CR	DIO-1 OUT/IN
2	ADR-2	Delimiter LF	DIO-2 OUT/IN
3	ADR-3	Delimiter EOI	DIO-3 OUT/IN
4	ADR-4	4/8 bit mode	DIO-4 OUT/IN
5	ADR-5	Input P/N logic switch	DIO-5 OUT/IN
6	ONLY/ADR	Output P/N logic switch	DIO-6 OUT/IN
7	Option	Mode switch 1 Tree type of operation mode	DIO-7 OUT/IN
8	BCD/HEX	Mode switch 2 Tree type of operation mode	DIO-8 OUT/IN

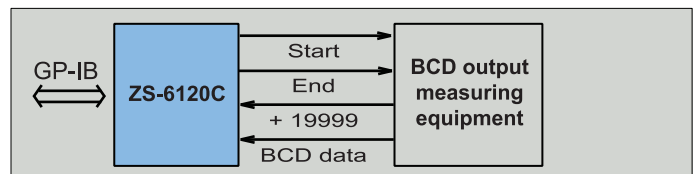
Note)

In the ONLY mode, ADR-5 is ON and becomes talk-only, and OFF turns to listen-only.

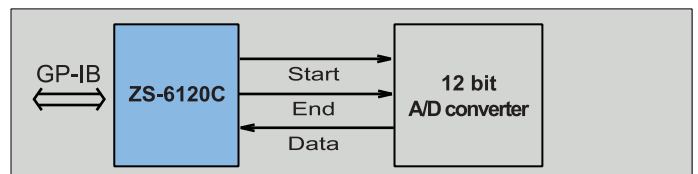
Input/output 8 bytes specify input byte and output byte with OUT/IN switch. Option corresponds to custom specification by software.

Example for usage

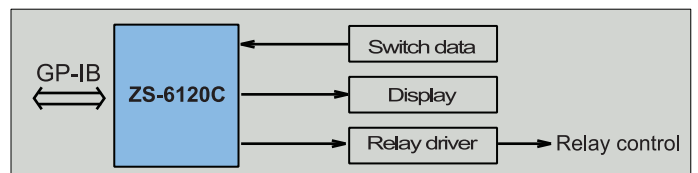
GP-IB interface function added to BCD output measuring



A/D converter data is available to convert to GP-IB



It is easy to make console box, etc



Specification

GP-IB function:
SH1, AH1, T5, TE0, L3, LE0, SR1, RL1, PP0, DC1, DT1, C0

Data code:
Binary or BCD/HEX

Input:

The adapter becomes a talker, it receives a parallel signal with the external device and sends data to the GP-IB side.

Amount of data 8 byte or less Output:

The adapter becomes a listener, receives data from the GP-IB side, and outputs parallel signals to external device.

Signal level:

TTL level, Fan out 10, switchable between positive and negative logic.

Specifications and appearance are subject to change without notice due to continual improvements.



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