Zenisu Keisoku, Inc

The PC becomes an FA controller without interface function.

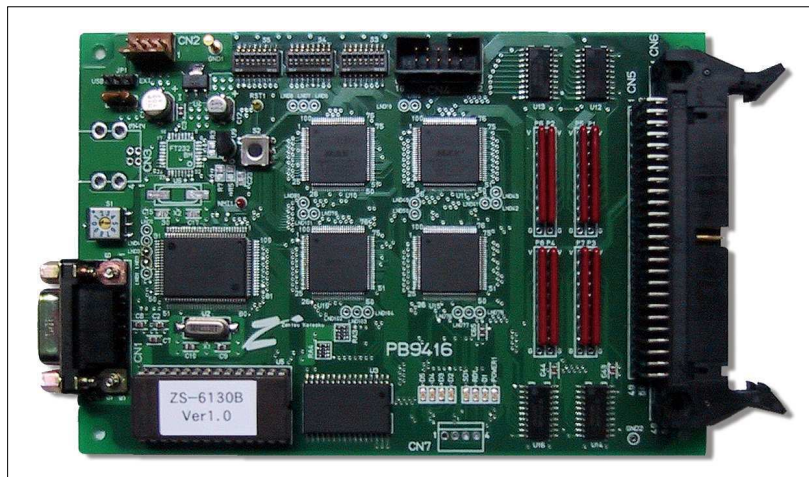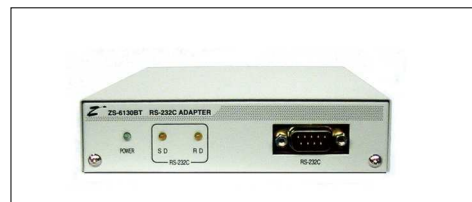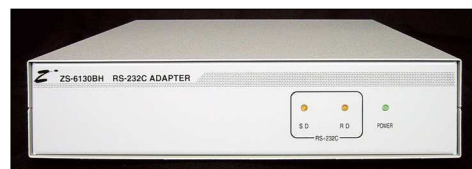**RS-232C** Adapter

ZS-6130B series

Data communication of parallel signals such as BCD can be performed by connectiong with personal computer or electronic device with RS-232C interface. It is possible to be input and output up to 64 bits of parallel data.
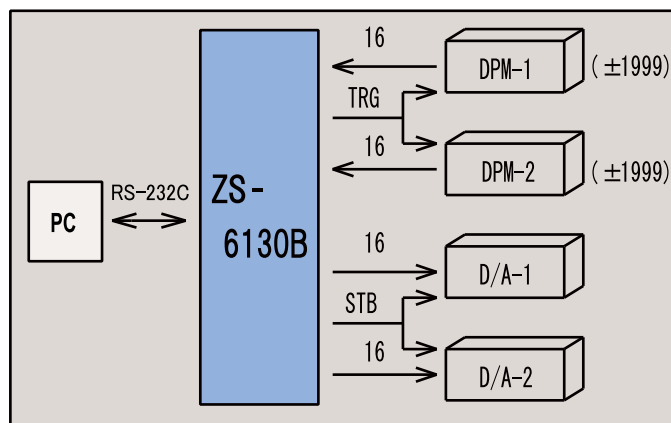
ZS-6130BT

ZS-6130BH

ZS-6130BP

Feature

● It is easy to connect with a PC.
● I/O can be assigned in byte unit (8bits).
● It is possibel to be selected BCD or HEX data code in 4 bit units.
● Output can be set in byte units or bit units.
● It is prepared control lines such as strobes and triggers in addition to data.
● It is possibel to be made with the DIP switch as below.
   ◎ I/O assignment
   ◎ Select data code
   ◎ Positive/negative logic of I/O data
   ◎ Positive/negative logic of control signal

Example for usage

It transmits and receives data with the personal computer using ZS-6130 the input of 2 digital meters and the output of D/A converter 2CH.


Model	ZS-6130BP	ZS-6130BT	ZS-6130BH
Feature	Printed circuit board type	Small case built-in type	Small case built-in type I can be added a expansion board
Data connector	HIF3BB-50PA or equivalent	HIF3BB-50PA or equivalent x2	57-40500 or equivalent x2
Power	DC+5V 400mA or less	DC+5V 400mA or less	AC 100V 20VA or less
Size	100(W)x150(D)x30(H) mm	130(W)x160(D)x32(H) mm	215(W)x252(D)x49(H)
Accessory	DC input cable Data connector (HIF33BB-50D-2.54R or equivalent)	DC input cable Data connector (HIF33BB-50D-2.54R or equivalent)	Data connector (57-30500 or equivalent)

I/O functions

ZS-6130B is possible to be supported up to 8bytes of parallel I/o signals. I/O selection is set by DIP switch in byte unit.
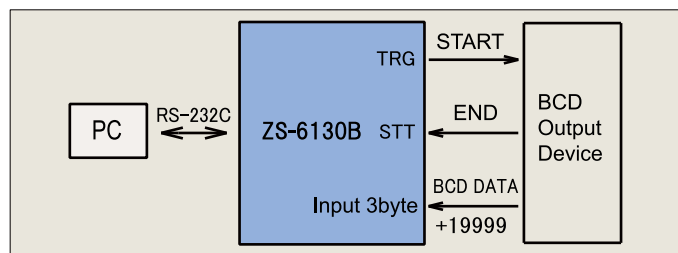
e.g) ZS-6130B is used for 4-byte input and 4-bye output.
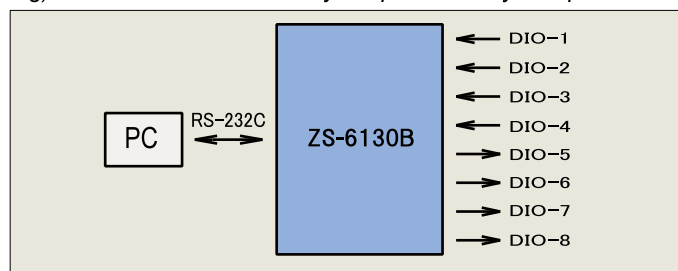
Operation mode

There are two ways of taking parallel data into the RS-232C side as follows.

1. The method of receiving parallel data by receiving "S" command outputted from the computer side.
2. The method of receiving the parallel data by receiving the START pulse signal output from the connected device.

Data code

Parallel data is divided into 4 bit units, it is converted to ASCII code and data transmission/reception with RS-232C is executed. Depending on the setting of the DIP switch, this ASCII code can select HEX mode and BCD mode as shown in the table below.

4 bit parallel data				RS-232C	
8	4	2	1	HEX	BCD
O	O	O	O	0	0
O	O	O	1	1	1
O	O	1	O	2	2
O	O	1	1	3	3
O	1	O	O	4	4
O	1	O	1	5	5
O	1	1	O	6	6
O	1	1	1	7	7
1	O	O	O	8	8
1	O	O	1	9	9
1	O	1	O	A	*
1	O	1	1	B	/
1	1	O	O	C	.
1	1	O	1	D	E
1	1	1	O	E	−
1	1	1	1	F	+

Control signal

The control signals shown in the table below are prepared so that the RS-232C adapter can synchronize with the connected device.

Name	Signal		Description
	Direction	Type	
UAR	OUT	L	It is possible to be received START puls, and positive and negative logic can be selected.
EAR	IN	L	Connected device is available to be received the data, and positive and negative logic can be selected.
STB	OUT	P	It signal indicates that all of data from RS-232C was output in parallel, and positive and negative logic can be selected.
STT	IN	P	Data ready signal from connected device. Pulse width is more than 30μs.
TRG	OUT	P	It outputs by "G" command. Pulse width is more than 100μs.
CLR	OUT	P	It is clear signal by "L" command. Pulse width is more than 100μs.

Note) P is Pulse signal, L is Level signal.

Specification

RS-232C:
  Full duplex communication method
  Asynchronous method
  Communication speed 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k,230.4kbps
  Non parity, Odd parity, even parity
  Stop length 1, 2
  Character length 7, 8
  Dsub 9 pin connector (RDEB-9P or equivalent)
  Amount of data 64 bit(8byte)
  I/O level TTL signal (Driver IC SN74ABT245)
  It can be selected Pull Up or Pull Down
  Conect to 50-core FC connector in 4byte unit

Accessory:
  DC power input cable (AC adapter is optional)
  Data connector
  * ZS-6130BP: HIF3BB-50D-2.54R or equivalent x2
  * ZS-6130BT: HIF3BB-50D-2.54R or equivalent x2
  * ZS-6130BH: 57-30500 or equivalent x2

Option

Ac adapter:
  GF12-US0520
    Input AC100 to 240V, Output DC5V 2A

Digital I/O level conversion board:
  ZS-7221P
  32-bit isolator output
  ZS-7211P
  24-bit TTL input is output with 24-make contact

Please download driversoftware and user's manual from our website. http://www.zenisu.co.jp