TECHNICAL BULLETIN

[Issue No.] T10-0028E **[Page]** 1/6
[Title] List of valid devices applicable for GOT900 series **[Date of Issue]** Oct., '05
[Relevant Models] GOT-A900 series

Thank you for your continued support of Mitsubishi Graphic Operation Terminal GOT900 series.

The peripheral devices listed in this bulletin have been concluded by Mitsubishi to be applicable for the GOT900 series.

Compatible product
A product that satisfies the requirements to be interfaced with Mitsubishi products.
(Note that satisfaction of Mitsubishi specifications is not guaranteed.)
Therefore, make sure to comply with the specifications for that product when using it together with Mitsubishi products.

1. Printers for GOT (compatible product)

Cautions

- Do not use the ESC/P raster-specific printer for the GOT.
- Set hard copy function to "Monochrome" when using the GOT with a monochrome type printer.
- When printing Chinese characters, use the printer that supports GB (simplified characters) or BIG5 (traditional) code, and includes the relevant fonts. Please refer to the applicable printer models below:

Manufacturer	Model
Seiko Epson Corporation	LQ-2080C (BIG5-compatible) LQ-1600K Ⅲ (GB-compatible)
Oki Electric Industry Co., Ltd	5530SC (GB-compatible)
Hewlett-Packard Development Company, L.P.	HP LaserJet1150, HP LaserJet1300

2. PC cards for GOT "Compact Flash PC card" (compatible product)

For GOTs compatible with compact flash PC cards, refer to the technical bulletin T10-0029 "Compatibility with commercially available flash PC cards".
(Please note that some GOTs are incompatible with compact flash PC cards.)

The GOT flash PC card (A9GTMEM-*MF) is applicable to A985GOT-V, A985GOT, A97*GOT and A960GOT. (Note that some restrictions are present.)
Cautions for using the flash PC card are given in the A985GOT/A975GOT/A970GOT/A960GOT User's Manual.

- When using the compact flash PC card with the following GOTs, A985GOT-V, A97*GOT and A960GOT, please use an adaptor (conversion between compact flash PC card and Type II conversion adaptor).
  We recommend using an adaptor manufactured by the same company as the compact flash PC card.

<Compatible model as of April 2003>

Manufacturer	Model
SanDisk Corporation	PCSDCFB-64-801 *1 *2 PCSDCFB-128-801 *1 *2
HAGIWARA SYS-COM	HPC-CF64V *2 HPC-CF128V *2

*1: Last three numerals of the model vary with the sales area.
Japan: -801 America, Asia: -768 Europe: -485
*2: For the A956WGOT, GOTs with hardware version F (April 2002) or later are compatible.

Precautions

- Format the memory card to "FAT16" before using it.

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3. GOT900 series compatible Bar Code readers (compatible product)

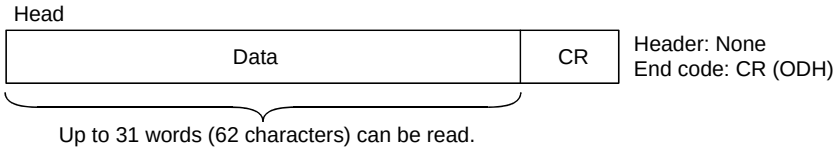
Manufacturer	Model
OPTOELECTRONICS Co.,Ltd	OPT-5125-RS232C(H) (Bar code Reader)
KEYENCE Corporation	BL-500 series (Bar Code Reader) BL-U1 (Power supply unit) BL-80R/100R (Bar Code Reader)
AIMEX Corporation	BR-530RS (Bar code Reader) BB-60-1 (Power supply unit)
Symbol Technologies, Inc.	LSH3502AHV（Handheld laser scanner） P/N50-04000-035J (Power supply unit) C31-31201-01J2 (D-sub, 9-pin cable)
	P302-RS-DOSV (Laser scanner, RS-232C cable, Power supply)
OMRON Corporation	V520-R221F (Bar Code Reader) S82S-0305 (Power supply unit) V509-W016 (D-sub, 9-pin-dedicated cable)
DENSO Corporation	HC36TR (Bar Code Reader) POWER SUPPLY P-200N (Power supply unit) SANWA SUPPLY KRS-423XFIK (RS-232C cable)
NEC Infrontia Corporation	BCH5542 (Bar Code Reader) BCV5070 (Bar Code Reader-dedicated adapter)

(1) GOT communication specifications

The GOT uses the following communication settings when connected to a bar code reader.
Therefore, make sure the bar code reader communication settings are setup the same as the following.

Item		Content
Baud rate		9600bps
Data format	Start bit	1
	Stop bit	1
	Data bit	8
	Parity	Even
Transmission control system		DSR/DTR

(2) Compatible bar code types
The GOT is compatible with following bar code data transfer format specifications.



The following bar code types are compatible with the GOT.

Manufacturer	Bar Code Types			
OPTOELECTRONICS Bar code Reader	WPC(JAN/EAN/UPC)	CODE-39	NW-7	2of5(Industrial)
KEYENCE Bar code Reader	WPC(JAN/EAN/UPC)	CODE-39	CODE-128	2of5(Industrial)
AIMEX Bar code Reader	WPC(JAN/EAN/UPC) NW-7	CODE-39 2of5(Industrial)	CODE-93 ITF	CODE-128
Symbol Technologies Bar code Reader	WPC(JAN/EAN/UPC) NW-7	CODE-39 2of5(Industrial)	CODE-93 ITF	CODE-128
OMRON Bar code Reader	WPC(JAN/EAN/UPC) NW-7	CODE-39 2of5(Industrial)	CODE-93 ITF	CODE-128
DENSO Bar code Reader	WPC(JAN/EAN/UPC) NW-7	CODE-39* 2of5(Industrial)	CODE-93	CODE-128
NEC Infrontia Bar code Reader	EAN-8 UPC-E DODE-39	EAN-13 ITF(2of5 Industrial) CODE-93	EAN-128 STF(2of5 Industrial) CODE-128	UPC-A CODABAR(NW-7)

*1 Full ASCII is not supported.

(3) Bar code reader communication settings
The following bar code reader communication settings are supported by the GOT.
(*: It is necessary to change the initial setting (default) of the bar code reader.)

(a) OPTOELECTRONICS

- Transmission method : Asynchronous type
- Stop bit : 1
- Parity bit : Even *
- Baud rate : 9600bps
- Terminator (Suffix) : CR
- Start bit : 1
- Data bit length (word length) : 8
- Communication control method : BUSY/READY(RS/CS)
- Header (Prefix) : None

(b) KEYENCE

- Stop bit : 1
- Parity bit : Even
- Baud rate : 9600bps
- Terminator : CR
- Data bit length (word length) : 8*
- Communication control method : RTS/CTS*
- Header : None

(c) AIMEX

• Transmission method	: No procedure CR*	• Start bit	: 1
• Data bit length (word length)	: 8	• Parity bit	: Even *
• Communication control method	: BUSY/READY(RS/CS)	• Baud rate	: 9600bps*
• Header	: None	• Terminator	: CR

(d) Symbol Technologies

• Stop bit	: 1*	• Data bit length (word length)	: 8*
• Parity bit	: EVEN	• Parity check	: None
• Hardware handshake	: None	• Software handshake	: None
• Baud rate	: 9600bps	• Header	: None
• Terminator	: CR*		

(e) OMRON

• Interface	: RS-232C	• Stop bit	: 1*
• Data bit length (word length)	: 8*	• Parity bit	: EVEN
• Baud rate	: 9600bps	• Header	: None*
• Terminator	: CR*		

(f) DENSO

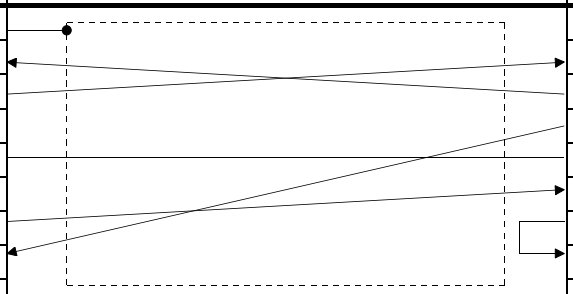
• Interface	: RS-232C	• Stop bit	: 1
• Data bit length (word length)	: 8	• Parity bit	: EVEN*
• Baud rate	: 9600bps	• Header	: None
• Terminator	: CR*		

(g) NEC Infrontia

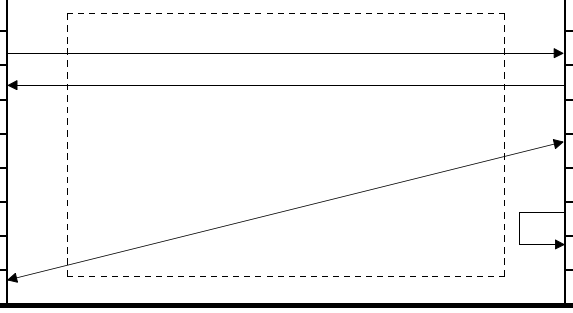
• Interface	: RS-232C	•Communication protocol	: No protocol mode
• Stop bit	: 1*	• Data bit length (word length)	: 8*
• Trigger switch control	: Auto-off mode*	• NW-7 start/stop code	: a/b/c/d*
• Baud rate	: 9600bps*	• Header	: None*
• Terminator	: CR*		

(4) Bar code reader cable pin-out connections
The following connection cable is applicable for the GOT and the bar code reader.
(Maximum cable length: confirm with the bar code reader manufacturer.)

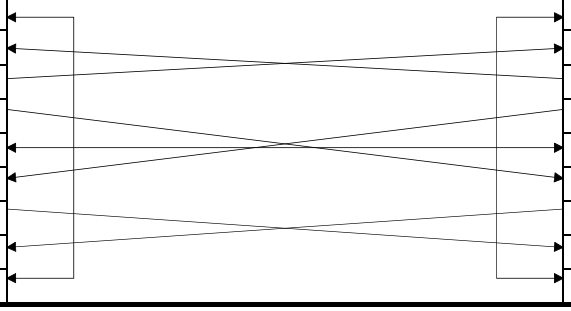
(a) Connection diagram
1) KEYENCE

KEYENCE power unit			Cable connection and signal direction	GOT	
Signal direction	Signal name	Pin No.		Pin No.	Signal name
Internal connection	SG	1		1	CD
	RD(RXD)	2		2	RXD
	SD(TXD)	3		3	TXD
	ER(DTR)	4		4	DTR
	SG	5		5	SG
	DR(DSR)	6		6	DSR
	RS(RTS)	7		7	RTS
	CS(CTS)	8		8	CTS
	-	-		9	-

2) OMRON

OMRON power unit			Cable connection and signal direction	GOT	
Signal direction	Signal name	Pin No.		Pin No.	Signal name
Internal connection	-	1		1	CD
	SD(TXD)	2		2	RXD
	RD(RXD)	3		3	TXD
	RS(RTS)	4		4	DTR
	CS(CTS)	5		5	SG
	-	6		6	DSR
	-	7		7	RTS
	-	8		8	CTS
	SG	9		9	-

3) NEC Infrontia

NEC Infrontia bar code reader adaptor		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
CD	1		1	CD
RD(RXD)	2		2	RXD
SD(TXD)	3		3	TXD
DTR(ER)	4		4	DTR
SG	5		5	SG
DSR(DR)	6		6	DSR
RS(RTS)	7		7	RTS
CS(CTS)	8		8	CTS
-	9		9	-

(b) Applicable connector

- Connector for GOT

Type	Description
Connector	9-pin D sub (female) connector (HDEB-9S(05) (HIROSE ELECTRIC CO.,LTD.) or similar product
Connector cover	Connector cover with inch thread (HDE-CTH1(4-40) (HIROSE ELECTRIC CO.,LTD.) or similar product

- Connector for bar code reader (Power unit, adaptor)
  Use a connector compatible with the bar code reader (power unit, adaptor) used.

(5) Cautions for using the bar code reader

The bar code reader manufactured by OPTOELECTRONICS Co.,Ltd is not compatible with the GOT without any modifications.
When ordering the bar code reader from the manufacturer, make sure to request them to modify the connector shape and pin No., in order that it can be connected to the GOT.

4. Hubs for Ethernet connection (compatible product)

Manufacturer	Model
PHOENIX CONTACT Inc.	FL HUB 10BASE-T FL SWITCH 8TX FL SWITCH SF 8TX FL SWITCH 5TX (hardware version 13 or later)

REVISIONS

Sub Number	Revision
D	[4. Hubs for Ethernet connection (compatible product)] Models were added.
E	The descriptions of [1. Printers for GOT] and [2. PC cards for GOT "Compact Flash PC card"] are revised.

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