

가,

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PROFIBUS		244 byte	9.6k~1.5Mbps	40m, 1.2km	32 repeater 122	PI PNO,
ASI	/tree	4~124 bit	167kbps	100m	31slave	ASI
S-LINK		1~128 bit	28.5kbps	200m	20slave	THANKS
wire		1~128 bit	28.5kbps	200m	20slave	NKE
CAN	/tree (CSMA/NBA)	1~8byte	Max.1Mbps	-	64	CiA
Device-Net	/tree (CSMA/NBA)	1~8byte	125,250,500kbps	100m/500k~500m/125k	64	ODVA
SDS	/tree (CSMA/NBA)	1~8 byte	125k, 250k, 500kbps	30m/1M~480m/125k	64	Heneywell
LONWorks	/tree	1~228byte	9.6k, 78k, 1.25Mbps	1.3km/78k, 300m/1.25M	32,385	
JPCN-1		256~2048byte	125k,250k, 500k,1Mbps	240m/1M~1km/125k	31slave	
InterBus -S	Ring/tree	512 byte	500kbps	12.8km	256	InterBus Club
SERCOS	loop	16 byte	2Mbps (4Mbps)	300m	8	--
Fieldbus Foundation	/tree	256 byte	31.25K 1M,2.5Mbps	1900/750/500m	32	Fieldbus
WorldFip	--					
M-NET	Polling/ selecting		19.2k, 38.4kbps	200m(38.4k) 1.2km(19.2k)	7	--

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ME-NET		가 ON/OFF	
SUMINET			住友
SYSMAC - LINK			
SYSBUS2		I/O	
TOSLINE -S20		PC-PC , PC-	東芝
TOSLINE -F10		PC	東芝
DPSC-F		,	富士
P		FA , broadcast compact 가, 가 /	富士
T		I/O	富士
MELSEC NET		,3	
MELSEC NET/MINI -S3		I/O, component	
ECL		flying	
CBL	component	LSI 가/	

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, 1998 8

IEC(International electro technical Commission) 1995

11 , IEC

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- star coupler

FF

- FOCUS

IC(Frontier-1 +), star

infra 「 가 key coupler

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10

(interoperability)

- 社DCS 가

FFI 「 (Fiber Optic Field

- / 가

Instrumentation System) 가

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PA FA

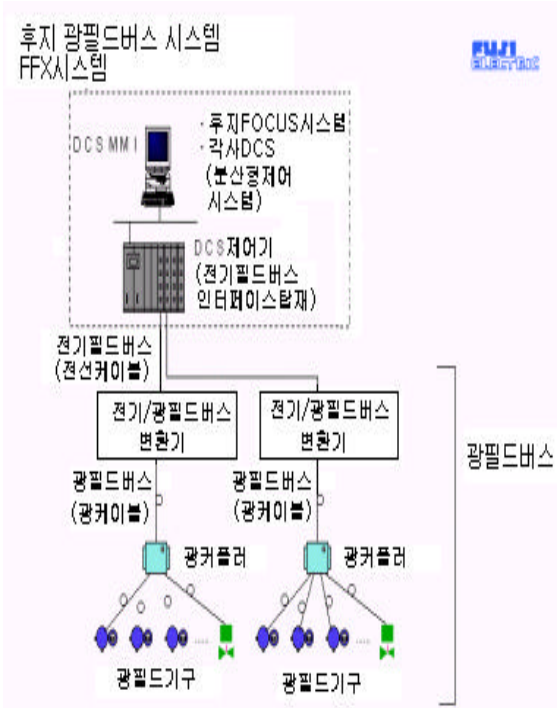
-

4-20mA

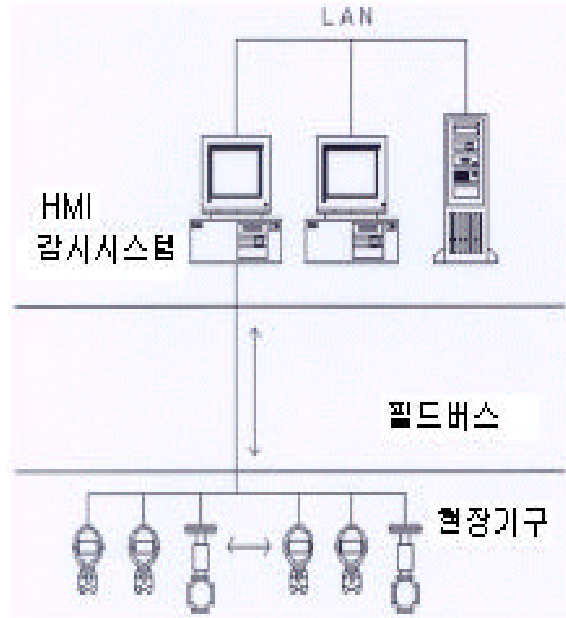
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DCS )

가



가



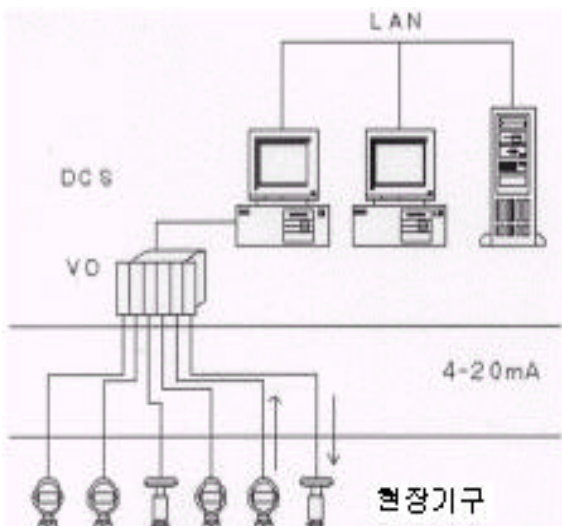
[www.nohken.co.jp/japan/fbhp/aboutfb/aboutfb.htm](http://www.nohken.co.jp/japan/fbhp/aboutfb/aboutfb.htm)

4-20mA

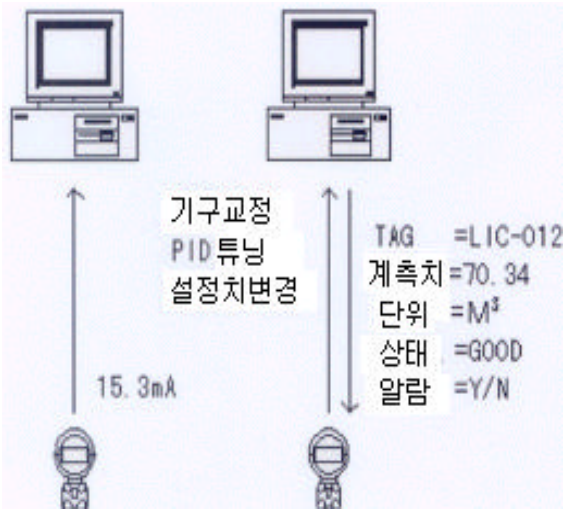
DCS

NOHKEN

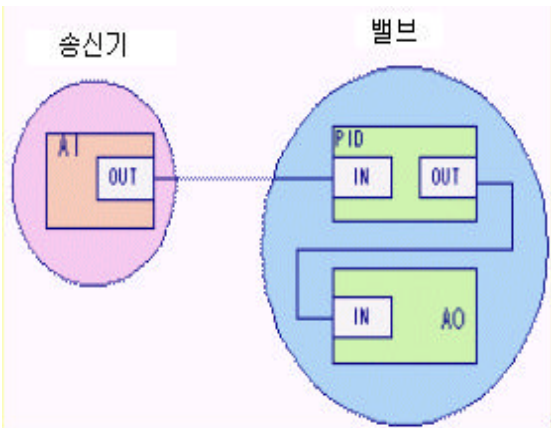
1:1



PC  
가



PC



PID

1

가 , PID , 3  
( )

(AI)  
PID (PID)

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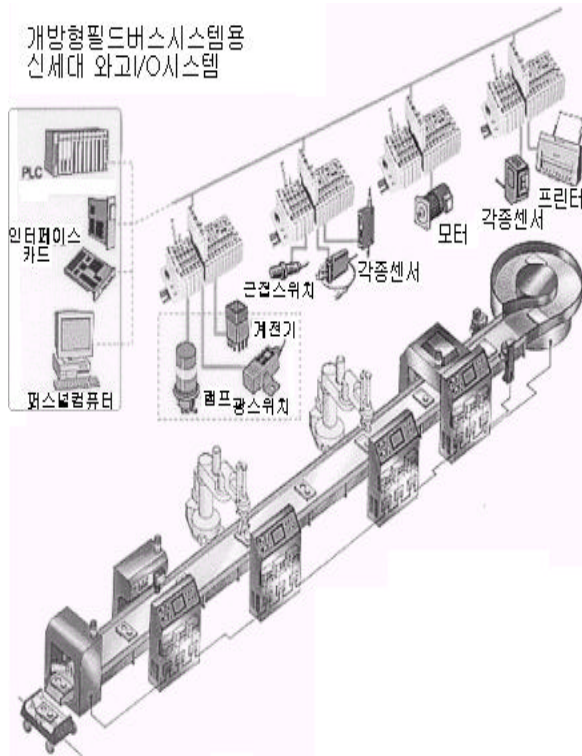
FA

가

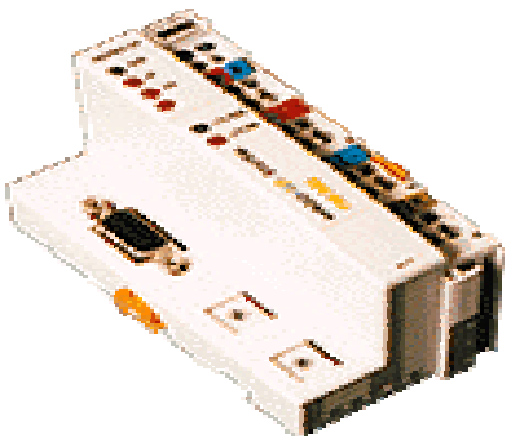
가

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I/O



가



	750 - 301	750 - 303
	9.6Kbps ~ 1.5Mbps	9.6Kbps ~ 12Mbps
I/O	64	64
	256 ( )	256 ( )
	122 ( )	DP : 64 FMS : 32
	DC24V( -15% ~ +20%)	DC24V( -15% ~ +20%)
	105mA 900mA	105mA 900mA
mm ) × ×	51×65×100	

I/O

가 . Bus coupler

PROFIBUS,

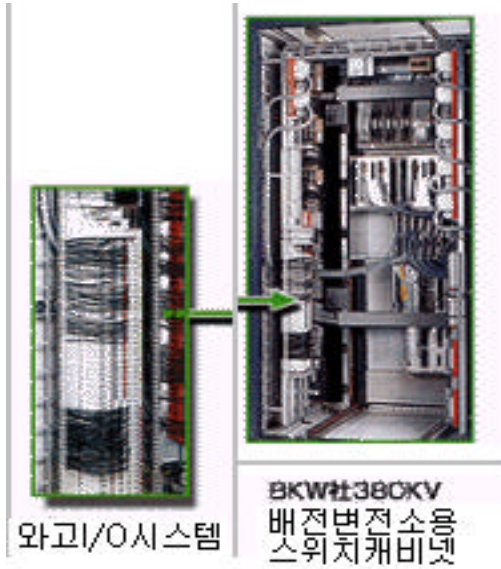
Interbus -S, Device Net, LON, MODBUS

BKW/FMB

Bern

BKW 1997

, 380KW  
( )



( )  
roll 가

I/O BOX

I/O  
4

2 16  
32 가 가

2  
I/O

가  
가  
I/O PROFIBUS

10ms

Interbus I/O  
가

가 가

[www.m-system.co.jp/Mame\\_Tisiki/M95.gif](http://www.m-system.co.jp/Mame_Tisiki/M95.gif)

BKW PROFIBUS - DP

가  
I/O

PROFIBUS

48VDC 가 , 가  
가 , 가가

PROFIBUS 1989

(DIN19245) 1996

(EN50170) , 2000

I/O

IEC (IEC61158) . ,  
 1989  
 (PI)가 1999 9  
 , 24 , 961 가  
 1700  
 200 PROFIBUS  
 가  
 50% 가 )  
 PROFIBUS (FA) 가 , 9  
 (PA) , 12Mbps 1km  
 3 가 .

PROFIBUS

(kbps)	9.6	500	1500	3000	12000
(m)	1200	400	200	200	100

PROFIBUS -FMS (Fieldbus Messange Specification) : PROFIBUS  
 PLC, DCS, PC ,

PROFIBUS -DP (Decentralized Periphery) : PROFIBUS  
 I/O, 가

PROFIBUS -PA(Process Automation) : PROFIBUS  
 IEC1158-2 가 .  
 가 )

9  
 12Mbps 1km  
 가 .

PROFIBUS ,  
 가 . 가  
 PROFIBUS Device Profile(  
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- : 9.6kbps ~ 12Mbps GSD
- : 126 . PROFIBUS
- : 244Byte/ 1 GSD
- : , ,
- : STP ,
- : RS -485 PROFIBUS
- : 1 PROFIBUS



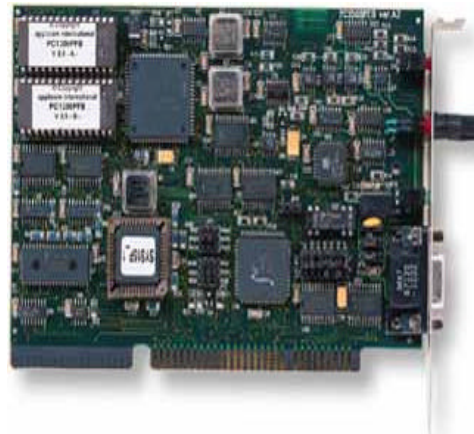
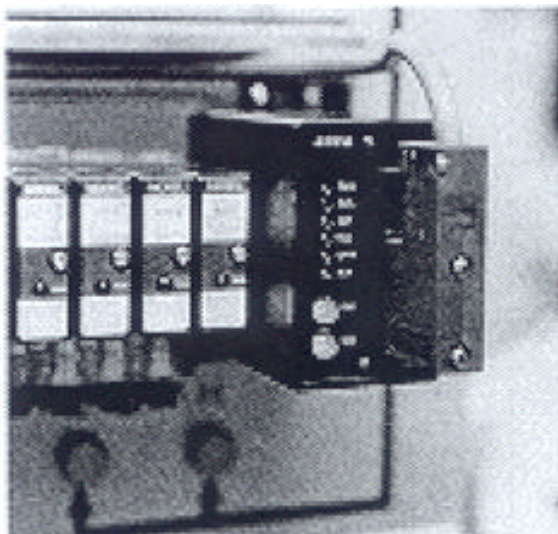
, M system  
e

I/O

M9

PROFIBUS

PC1500PFB



I/O

M9

PC1500PFB

PROFIBUS

Profibus

API

Profibus

PROFIBUS Interface

Intel80186

PROFIBUS Siemens

1 Profibus

National instrument

1~8

PC1500PFB

. PC1500PFB

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ISA

PROFIBUS

Siemens PLC

. National instrument