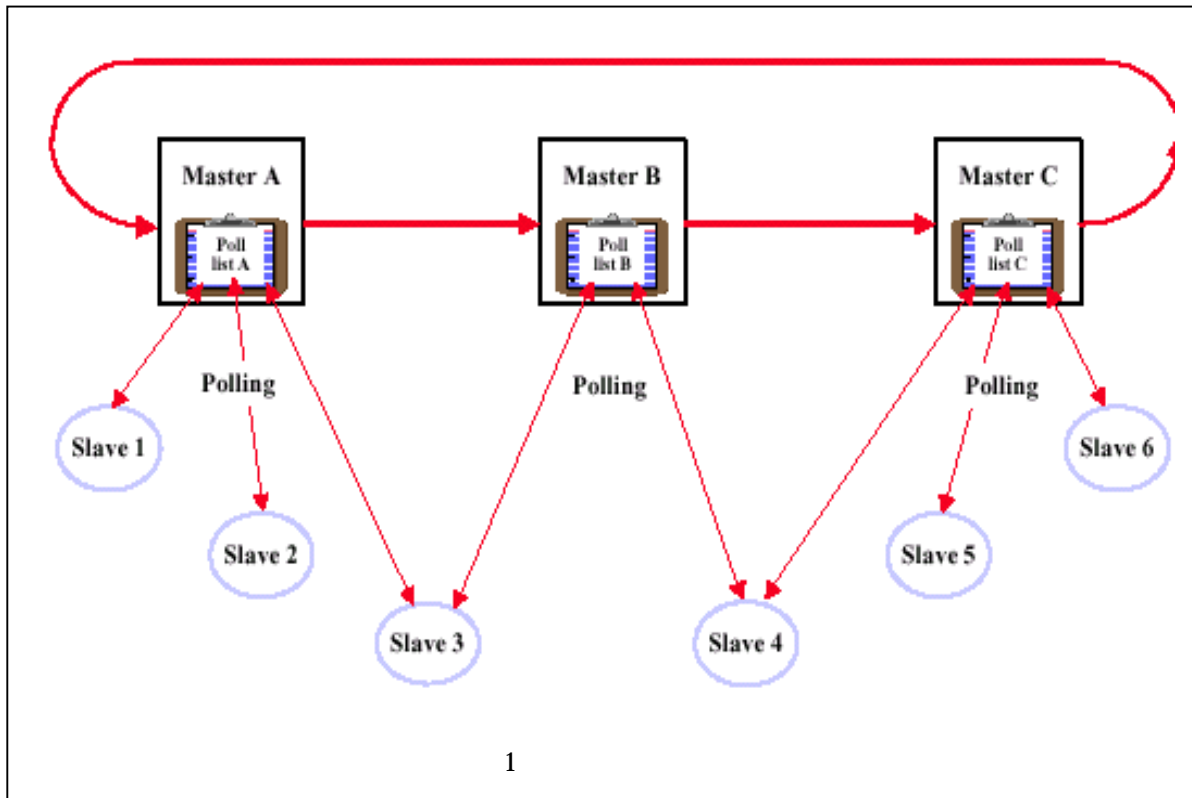


# Profibus

# FAQ

PROFIBUS segment 32 가  
126

1. bus 가? 3. Bus 가?  
( CMA/BA, CMA/CD, master/  
slave, multiple masters )



PROFIBUS Master/Slave (hybrid media access) Token 가 가

PROFIBUS ring star 가 .

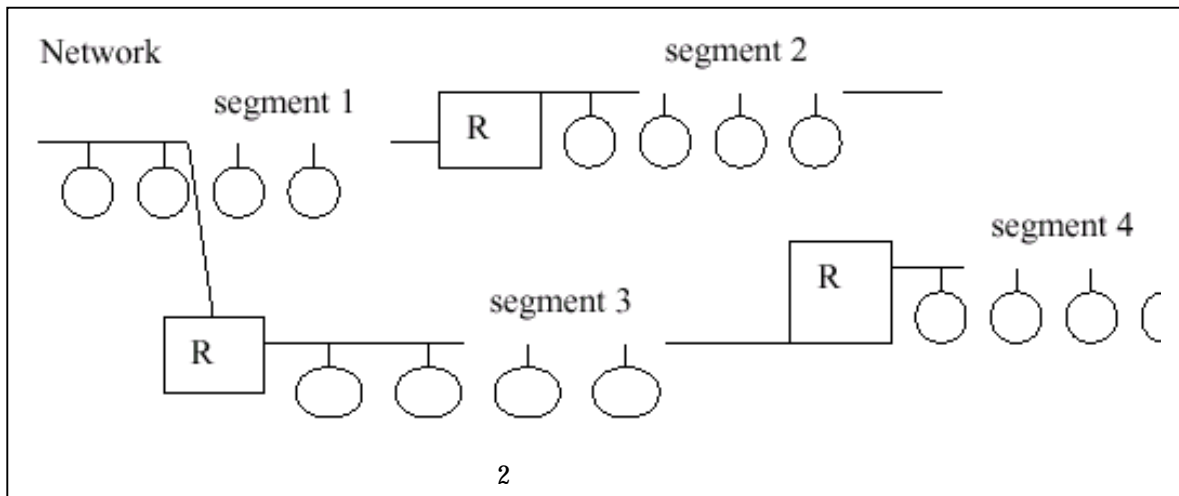
Services :

- SDN (multicast/broadcast 가 )
- SDA 가?
- SRD , ( bi-directional ) (Copper)

1,000m 9.6 – 187.5 kBaud .

2. ?

## 4. Repeater 가



fiber optic link  
2,300/15,000m 가

link . plastic  
- Infrared

5. 가 가?

6. bit

가 가?

- Copper cable (IBM Shielded twisted pair cable)

PROFIBUS 0 244 byte 가

- . solid and stranded cable
- . specialized materials for plastic surrounding

7. bus ?

- fiber optic

- . glass

bus power supply .

	9.6kBaud – 187.5kBaud	500kBaud	1.5MBaud	3-12MBaud
per segment	1000m	400m	200m	100m
with repeater	10000m	4000m	2000m	1000m
per fiber optic segment	15 km	15 km	15 km	15 km
total with fiber optic	>200 km	>200 km	>200 km	130 km

terminal resistors

12. 가  
가?

8. Field device가 bus  
가?

Power-up config\_check ident  
number 가

PROFIBUS PA 가  
IEC 1158-2

13. algorithm 가  
가?

coupler 120mA  
300mA

PROFIBUS  
가  
- byte Checkbit가  
- Checksum  
- frame Startdelimiter  
- Addressing (source destination)  
- Inactivity detection  
- Master Transmitter check  
- Token passing  
- error  
- PROFIBUS message

9. addresses 가?

가 가  
- DIP switche  
- bus address bus  
Any choice is possible

10. address

address  
Master token  
frame address  
Slave  
mater

14. parameter programming 가  
가? ( logic inversion  
Boolean operation)

parameter setup  
- PROFIBUS parameter(  
237 byte)  
parameter  
- master PC Parameter  
load

11. address  
가?

-  
- Slave  
- master

15. What I/O granularity does the Bus support.

- Granularity  
 - Integer, unsigned, floating point, string  
 가  
 - node bit granularity IO-module 가  
 ..  
 - AS-I bit-level bus  
 link가 가

20. 가 ?  
 PTO 800  
 1600

16. address ?  
 byte가

21. Network scanner card ?  
 - computer : PCI, PCMCIA, PC 104  
 ISA, VME.  
 - PLC PROFIBUS card가  
 . (AB, Modicon, GE, Mitsubishi )  
 - solution

17. AC DC point  
 가? 가 가 가  
 ..

22. PROFIBUS  
 3rd party  
 가?

DC ET200M card channel .....\$  
 AC ET200M card channel .....\$  
 small node 가 16 가  
 ET200L .....\$

PROFIBUS PROFIBUS International  
 25  
 working Group  
 가

18. protocol 가?  
 Protocol 70% 가  
 performance metrics 40%  
 가

***Installation, Diagnostics and Commissioning***

19. multiple protocol 가?  
 - PROFIBUS FMS, DP, DP 3가

1. 가?  
 - bus 가  
 - (electric meter)  
 .(

segment 110 130 ohm  
가 )

protocol 가 .(network  
configuration PLC configuratio  
)

## 2. Segment

?

- Segmenting repeater optical link module
- termination

## 3. Network

가?

PROFIBUS Master application  
가 .

- slave (slave , , )
- slave
- Master
- counter

Service engineer bus monitor bus

- Monitoring
- Hardware filtering mechanism
- Time stamps
- Trigger conditions
- Special events

## 4. Network configuration

가?

- Network download protocol

5. node configuration 가  
monitoring 가

가?

- bus monitor 가 configuration tool
- PLC scan cycle time reaction time .

## 6.

?

- Master(PLC PC)가 가 field device
- slave master application

7. fault  
MTTD(mean time to diagnose) 가

가?

- Error .
- Worst case 2 cycles is the maximum delay to transport diagnostic to the master.(regarding the figures below, this is less than 2,2ms/13,4ms at 12Mbaud/1.5Mbaud).
- Every other actions and their duration is application dependant. If your system has a backup strategy for that error the bus topology helps to run even in the presence of an error.

**8. hot swap** 가 가?

- PROFIBUS

- Slave device master  
가 ..

**9. program-mer**

가?

- PC software가

- startup

- master slave  
parameter bus

**Performance Metrics**

**1. 256 I/O(4096 total points) 16**

가

?

- 12MBaud 1.09ms

- 1.5MBaud 6,71ms

**2.**

가?What is the best and worst case repeatability of this configuration.

- 99%가

timing

- (station dropping out) timing

- 1 500/100µs(1,5/12Mbaud)

- station 700/300µs  
가 .

**3. 256 I/O(16 bit words)**

?

1 . PROFIBUS format

가 . 256 words 4096 I/O point

. Master station 가

PLC PC I/O

가

**4. token 가?**

- mono master system token

- multiple master Token

가 .

- Master가 token

1.5Mbaud 1.6 ms

12Mbaud 0.67ms .