GUIDE

PROFINET

GDHF-PN02



Wuhan Guide Technology Co.,Ltd.

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TCP/IP

PROFINET TCP/IP IT TCP/IP IT

100 ms

RT

5 10ms

PROFIBUS DP

TCP/IP

PROFINET

Layer 2

PROFINET

IRT

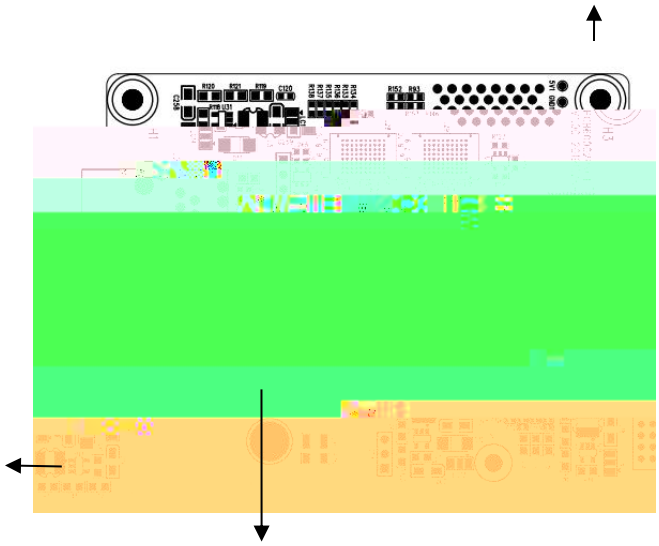
Motion Control PROFINET Isochronous Real-Time, IRT

100 1ms 1μs

5E

TIA/EIA-568-B 100

GDHF-PN02



1 GDHF-PN02

PROFINET GDHF-PN02

HF650 HF630 HF620

PROFINET PROFINET

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- PID

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PROFINET GDHF-PN02

J14

PROFINET GDHF-PN02

- HF650 HF630 HF620
- PROFINET V2.31

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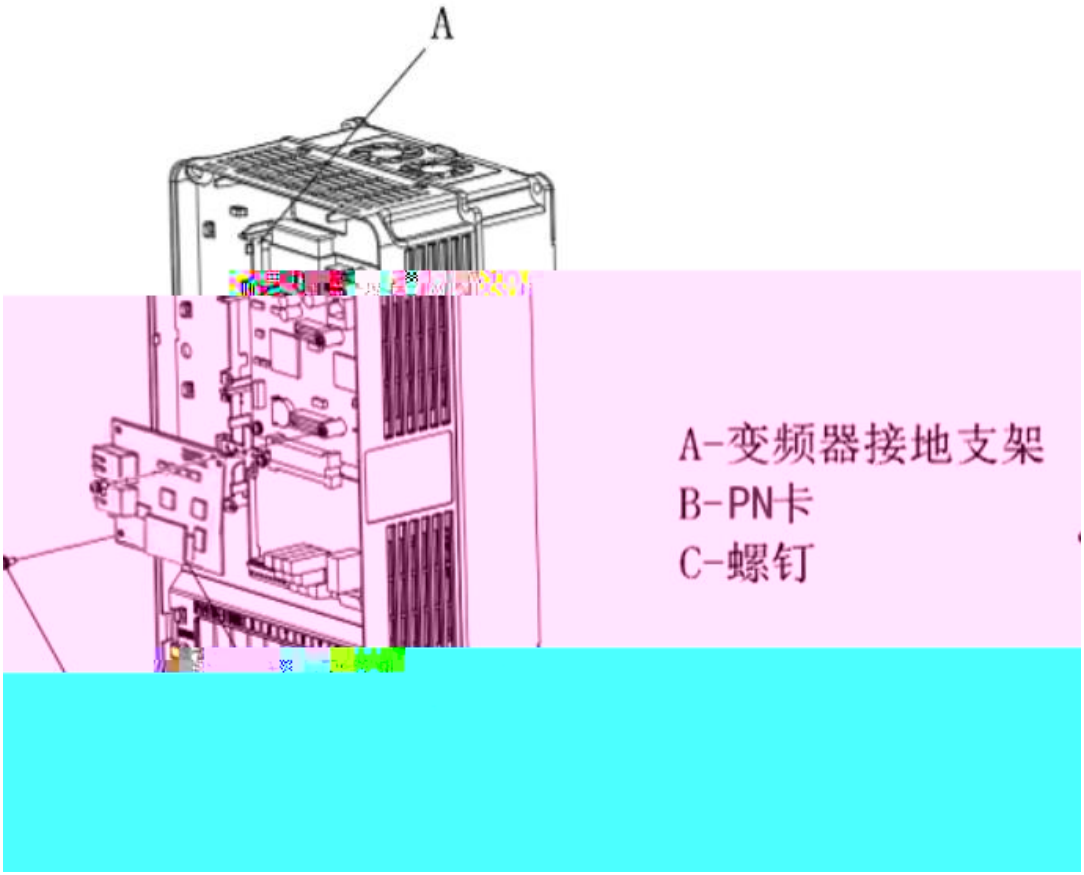
GDHF-PN02 J14

H3 H2

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EMC GDHF-PN02

GDHF-PN02 RJ45



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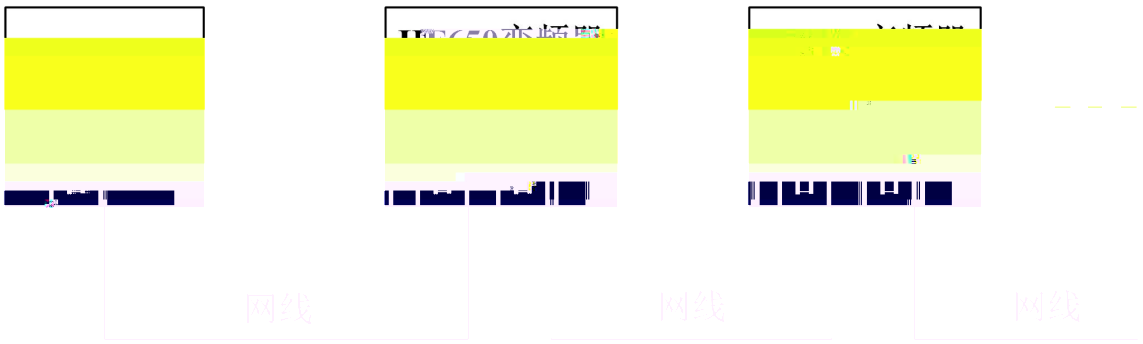
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TIA/EIA-568-B



3 PROFINET

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GDHF-PN02

(GSDML)

http://www.guide-electric.com GSDML

GSDML-V2.31-GUIDE-PN.XML

PROFINET

GDHF-PN02

PROFINET

P33.0		[0] [1]	0	1	0
P33.2		[0]PPO1 [1]PPO2 [2]PPO5	0	2	1
P33.5		[0] [1] [2] [3]	0	3	0
P33.6		ms	0 1000		50
P33.7		[0] [1]	0	1	1 20
P33.8		À			

P33.46	[W0]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 4	0
…	…	…	…	…

1. PROFINET

[0] PROFINET

[1] PROFINET

2. PROFINET

PPO Parameter/Process Data Objects, /

PROFINET PPO

2 PPO

PPP05

3.

HF650

4.

PLC

5.

HF650

6.

PLC

7.

PROFINET GDHF-PN02

100Mb/s

PROFINET

PROFINET GDHF-PN02

PROFINET PROFINET

PPO Parameter/Process Data Objects

/ PPO

PPO

	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15
PPO1	W0	W1	W2	W3	W4	W5										
PPO2	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9						
PPO5	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13		

4 PPO

PLC

2

W0	PA_CTRL	bit		
		0	PA_ENABLE	‘0’ ‘1’
		1	WRITE	‘0’ ‘1’
		2	SAVE_to_FLASH	‘0’ ‘1’ FLASH
		3 ~ 15	Reserved	
W1	Address	byte	[15..08]	[07..00]
		Data		
W2	0	0		
W3	Data	16		

PLC

3

W0	PA_STATUS	bit		
		0	Reserved	
		1	Reserved	
		2	SAVE_to_FLASH	‘0’ ‘1’ FLASH
		3	ILLEGAL_ADDRESS	‘0’ ‘1’
		4 ~ 15	Reserved	
W1	Address	byte	[15..08]	[07..00]
		Data		
W2	0	0		
W3	Data	16		

4

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4 5

HF650

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4

CW0.0	RUN	‘0’ ‘1’
CW0.1	RUN@REV	‘0’ ‘1’
CW0.2	AntiCrabOpen	‘0’ ‘1’

CW0.3	RESET	‘0’ ‘1’
CW0.4	External FAULT	‘0’ ‘1’ PROFINET
CW0.5	External ALARM	‘0’ ‘1’ PROFINET
CW0.6	DRIVE ENABLE	‘0’ ‘1’
CW0.7	MA/SL Switch	
CW0.8	SPD/TRQ Switch	‘0’ ‘1’
CW0.9	HOOK	‘0’ ‘1’
CW0.10	FIELD ENABLE	‘0’ ‘1’
CW0.11	Torque_Limit_Ctrl	‘0’ ‘1’ PROFINET
CW0.12	MOTION_CTRL	‘00’ 1

CW0.13		‘01’ 2 ‘10’ 3 ‘11’ 4
CW0.14	TORQUE_ZERO	‘0’ ‘1’
CW0.15	FREE_RUNNING_STOP	‘0’ ‘1’

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SW0.0	READY	‘0’ ‘1’
SW0.1	RUN	‘0’ ‘1’
SW0.2	FAULT	‘0’ ‘1’
SW0.3	MOTOR BRAKE	‘0’ ‘1’
SW0.4	WARNING	‘0’ ‘1’
SW0.5	DIRECTION	‘0’ ‘1’
SW0.6	M_STEP0	1 ‘0’ 1 ‘1’ 1
SW0.7	M_STEP1	2 ‘0’ 2 ‘1’ 2

SW0.8	M_STEP2	3 ‘0’ 3 ‘1’ 3
SW0.9	M_STEP3	4 ‘0’ 4 ‘1’ 4
SW0.10	Reserved	
SW0.11	Reserved	
SW0.12	REMOTE/LOCAL	/ ‘0’ ‘1’
SW0.13	Reserved	
SW0.14 SW0.15	MOTION SEL	‘00’ 1 ‘01’ 2 ‘10’ 3 ‘11’ 4

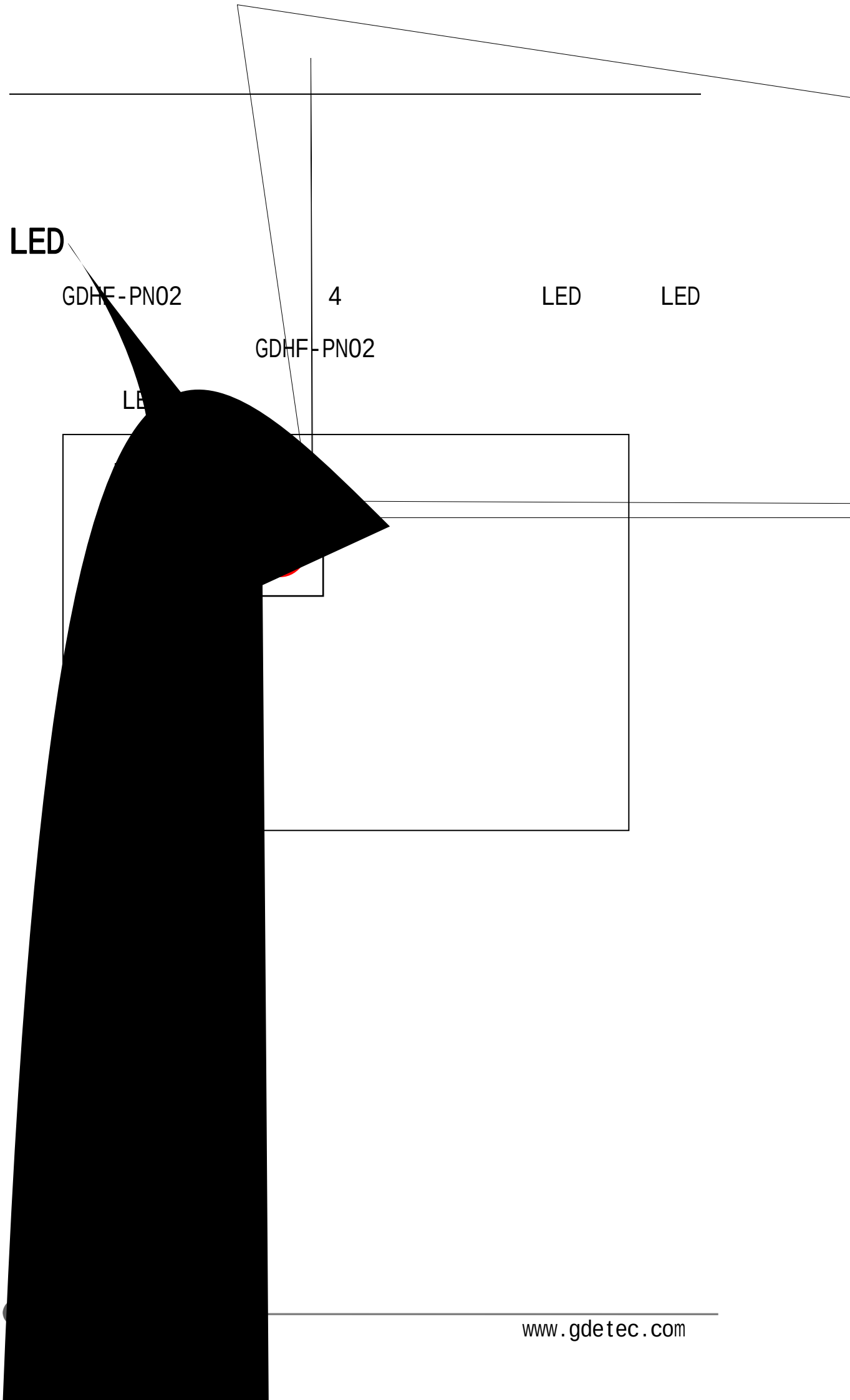
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PROFINET


LED
GDHF-PN02
4
LED
LED
GDHF-PN02

SXNC		PROFINET RT
CPU_RUN		PROFINET PROFINET

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GSDML XML P

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GSDML

http://www.guide-electric.

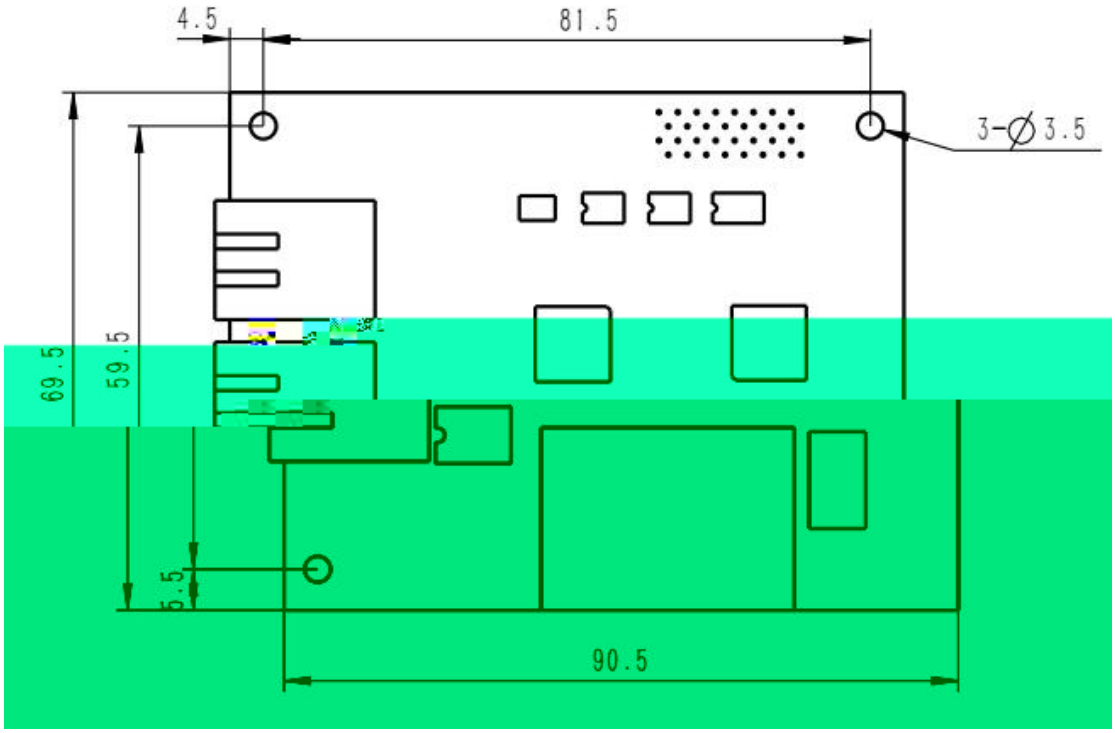
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5 PROFINET mm

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PROFINET

5E TIA/EIA-568-B

	A PROFINET	B DIN 19245 Part1	
	135~165(3~20MHz)	100~130(f>100kHz)	W
	<30	<60	pF/m
	<110	--	Ω/km
	>0.64	>0.53	mm
	>0.34	>0.22	mm^2

100

100Mbit/s

PROFINET V2.31

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