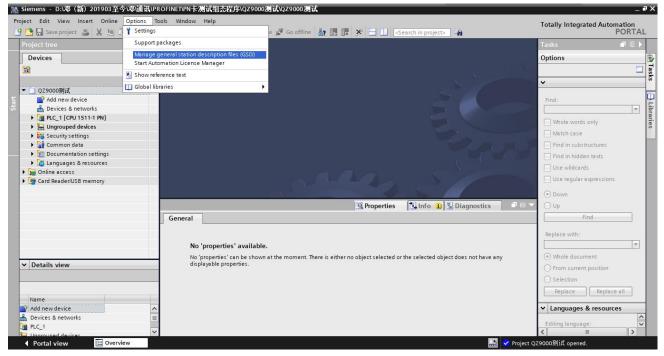
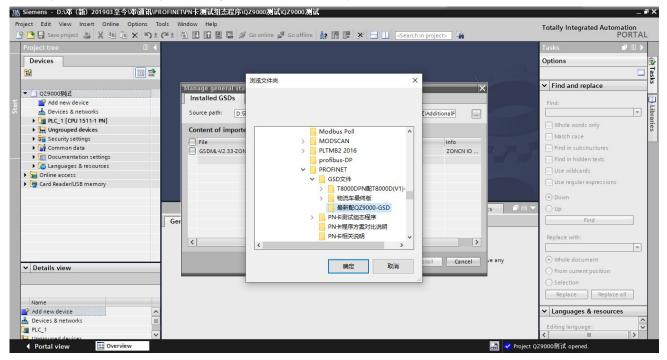
**ZONCN T9000 Profinet Simple Instruction Manual** 

## 1. Install GSD file

Step1: Open the TIA Portal, click "Options" -> "Manage General Station Description File GSD"



Step2: Follow the steps in the figure below, select the path to store GSD, and click OK

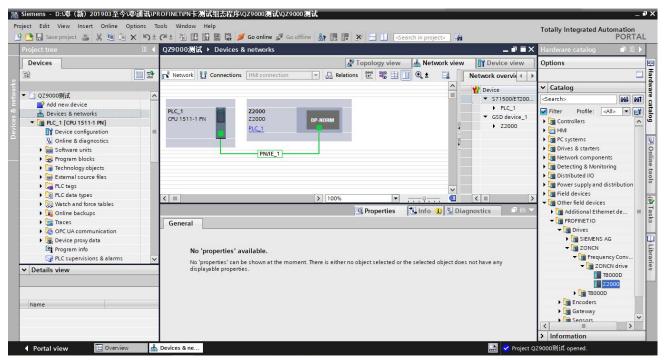


Step3: After clicking OK, all GSD files in the catalog will be listed, tick the GSD that needs to be installed, click Install, and you can use it after the installation is complete.

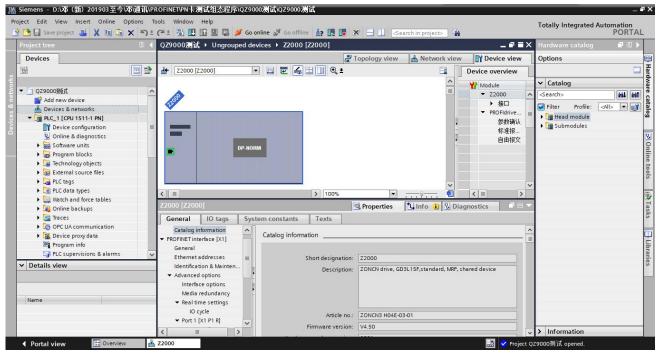
Mar	age general station description				×
In	stalled GSDs GSDs in the p	project			
So	urce path: D:\邓(新)201903至	今欧通讯IPRO	FINET\PN卡测试	组态程序\QZ9000测试\Additi	onalF
Co	ntent of imported path				
	File	Version	Language	Status	Info
	GSDML-V2.33-ZONCN-profidrive-Z	V2.33	English, Chi	Already installed	ZONCN IO
<					>
				Delete Install	Cancel

#### 2. Use in the TIA Portal

1) After installing the GSD file, you can find the corresponding device in the TIA Portal, the device name is "T8000DPN", and the path is: "other site devices"-> "PROFINET IO" -> "I/O" -> "Drives" -> "ZONCN "-> "Frequency Converter" -> "ZONCN drive" -> "Z2000"



2)Set the device name: After adding the Z2000 module to the device, double-click the module to set it and modify the device name. The name needs to be the same as the actual name inside the module. The current default name of the module is "Z2000". If you need to modify it, you can go through "Online Diagnose "-> "Accessible Device" to modify the actual name of the device online. In short, the name in the configuration must be consistent with the actual name inside the module.



3) Profinet Communication Protocol Description

#### a、 The communication parameter settings are as follows

Devices   Image: Second seco	^ <b>*</b>	ce overview Module ▼ Z2000				🚽 To	pology vie	ew 🔥 Network	view 📑 Device vi	iew	Options	
Q29000颗试 Add new device Devices & networks Purces 1 (PU 1511-1 PN) Device configuration	^ <b>*</b>	Vodule 7 Z2000										
Add new device	^	- Z2000	1.									
Add new device Devices & networks Devices L [CPU 1511-1 PN] Device configuration	^	- Z2000		Rack	Slot	Laddress	Q address	Tune	Article number		✓ Catalog	
Devices & networks Devices & networks Device configuration				0	0	Tuddress	Q bourcas	Z2000	ZONCN3 H04E-03-01		<search></search>	init ini
PLC_1 [CPU 1511-1 PN] Device configuration	-	▶ 接口		0	0 X1			72000	2011010100001			
Device configuration		▼ PROFIdrive驱动轴_1		0	1			PROFIdrive Module		_		<all> 💌 💽</all>
	2	参数确认	_	0	11			Parameter Access P.			🕨 🛅 Head module	
V. Online & diagnostics		标准报文 1		0	12	03	03	Standard Telegram 1			🕨 🏹 Submodules	
	Nig.	自由报文		0	13	419	411	Free Telegram				
Software units	ă -	DHAN		0	2			2				
Program blocks				0	3							
Technology objects				0	4							
External source files				0	5							
PLC tags				0	6					~		
PLC data types	<					III				>	1	
Watch and force tables	参数确认	Parameter Access	Pointl			10	Propertie	s 🗓 Info 🚺 🛛	Discussion		1	
Online backups	-	1					Propertie	s Transo T	Diagnostics	And see the		
🕨 🔯 Traces	General	IO tags Sys	stem cons	tants	Texts	s						
OPC UA communication	▼ General											
Device proxy data	Catalog	information	Wodule	e param	neters _	_						
Program info	Module pa	rameters	Mode	ule Para	meter							
PLC supervisions & alarms	~											
Details view					B	audrate :	115.2K					
			1			Parity :	8 DataLen,	1 StopBit, No Parity			1	
					Inten	val Time :	10					
Name			-		interv	or mile .	10					

# b Directly control the start and stop through "Message 1", and set the frequency

1.1 Standard Communicate Data 1

Byte	Output	Input
1	Control Word (STW1)	State Word 1 (Z1W1)
2		
3	Setting value (NSOLL_A)	Actual value (NIST_A)
4		

STW1 = 0x0400 Stop

STW1 = 0x0401 Start

NSOLL_A = 0~0x4000	Corresponding inverter Forward 0~50HZ
NSOLL_A = 0x8000 ~0xC000	Corresponding inverter Reverse 0~50HZ

For example:

According to the address allocated by the configuration: STW1 = QW0; NSOLL\_A=QW2

	标准报文 1		0	12	03	03	标准	报文 1
	自由报文		0	13	419	411	自由	报文
· 🔜 监控与强制表	1	▲ 1	"SpeedAxis_1_Acto	%QW0 %QW7	十六进制 十六进制 ▼	16#047F	16#047F	
品 监控表_1		3	Speedrois_1_Acto	<新増>		10#4000	10#4000	

In the monitoring table, by assigning values of 0x0401 and 0x0400 to QW0, control the start and stop of the inverter

In the monitoring table,

control the start and stop of the inverter by assigning values of 0x0401 and 0x0400 to QW0; control the forward rotation of the inverter by assigning values of 0 to 0x4000 to QW2; control the reverse rotation of the inverter by assigning values of 0x8000 to 0xC000 to QW2

### c、 "Free Message"

Byte	Output	Input
1	Rus voltage	Terminal output
2	Bus voltage	Terminal output
3	Output voltage	
4	Output voltage	
5	Output ourrent	
6	Output current	
7	Output power	
8	Output power	
9	Output torque	

10						
11	Duraning an end					
12	Running speed					
13	X input signal					
14	A input signal					
15	Fault info					
16						
<b>_</b>	标准报文 1	0	12	03	03	标准报文 1
<b></b>	自由报文	0	13	419	411	自由报文

From the above figure, we can see that the address input assigned to the "free message" is IB4~IB19, combined with the free message definition table, we can see: IW4 = bus voltage; IW6 = output voltage; and so on. IW16 = X input flag

The address output is QB4~QB11, combined with the table, we can see that QW4 = terminal output

o

%IW6	十六进制		16#0000	
%IW16	十六进制		16#0421	
%QW4	十六进制	-	16#0000	
	The new providence in the second			and the second se
%IW6	十六进制	16	#0000	
	十六进制 十六进制		#0000	
%IW6		16		

By connecting the COM terminal and the FWD terminal with a switch, Switch the switch state , you can detect the change of the input state in IW16.

%IW6	十六进制	16#0000		
%IW16	十六进制	16#0020	<b>-</b>	
%QW4	十六进制	16#0000		
<新増>				
%IW6	十六进制	16#017C		
%IW16	十六进制	16#0020		
%QW4	十六进制	16#0000		
%IW6	无符号十进制	380		
v starting the	e inverter, vou can see	e the change of IW6 (o	utput voltage 380	V)
,	1 A A	十六进制 16#0020		
	🗐 %QW4	十六进制 📃 🔽 16#0004	4 16#0004	🗹 🧘

By changing the value of QW4, the output of the relay can be controlled.