# PENKO Engineering B.V.

Your Partner for Fully Engineered Factory Solutions



How to...

Connect a 1020 Profinet to a Siemens PLC



# Inhoudsopgave

ardware connection
oftware
a Portal V15.1
Create a project
Add a PLC to the project
Assign an IP address to the PLC7
Add the GSDML file to the project
Devices & networks
PLC Tags



# Hardware connection

Connect the PLC with an Ethernet cable to 1 of the Ethernet ports of the 1020 on the left side, it does not matter which port you choose. The other Ethernet port on the 1020 can be used to connect other Profinet devices.

You can also connect the PLC and 1020 through an Ethernet switch.





# Software

The software that is used in this How to:

Tia Portal V15.1

The GSDML file for the 1020 can be downloaded from the Penko website:

https://penko.com/Support/Software/



# Tia Portal V15.1

# **Create a project**

Open Tia Portal and click on Create new project.



Give the project a name and click on Create.

₩ s	iemens					_ # X
						Totally Integrated Automation PORTAL
	Start			Create new project		
			Open existing project	Project name:	S7-1200 1020 with Profinet	
			Open existing project	Path:	C:\Users\mrossum\Documents\Automation	
			🥚 Create new project	Version:	V15.1	Ŧ
			Migrata project	Author:	mrossum	
			inigrate project	Comment:		<u>^</u>
		<b>.</b>				~
						Create



# Add a PLC to the project

# Click on Configure a device.

鴉 Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet						
Start			First steps			
Devices &	•	Open existing project	Project: "S7-1	200 1020 with Profin	et" was op	ened successfully. Please select the ne
networks	<b>V</b> .	Create new project	Start			
PLC programming	-	Migrate project	Juin			
Motion & technology		Close project	Ι.			
Visualization	1			Devices & networks	¢.	Configure a device
Online & Diagnostics	10				Ŷ	Write PLC program
						Configure technology objects
		<ul> <li>First steps</li> </ul>			Ø	Configure an HMI screen

Click on Add new device, select your PLC and click on Add.

A Siemens - C:\Users\mrossum\Docu	ments\Automation\S7-1200 1020 with Profinet\S7	s7-1200 1020 with Profinet
Start 😽		Add new device
Devices &	<ul> <li>Show all devices</li> <li>Add new device</li> </ul>	Device name: PLC_1
PLC programmingImage: Compare the second se	Configure networks	Image: Controllers       Image: Controllers         Image: Controllers       Image: Controlers         Image: Controll
	00110011001 00110011001 11001100110	Copen device view



#### Assign an IP address to the PLC

Double click on the green square of the PLC.



Here you can set the IP address for the PLC.

PROFINET interface_1 [Modul	PROFINET interface_1 [Module]							
General IO tags Sy	stem constants Texts							
General Ethernet addresses	Ethernet addresses							
<ul> <li>Advanced options</li> </ul>	Interface networked with	Interface networked with						
Interface options								
<ul> <li>Real time settings</li> </ul>	Subnet:	PN/IE_1						
IO communication		Add new subnet						
Real time options								
<ul> <li>Port [X1 P1]</li> </ul>	IP protocol							
General								
Port interconnection		Set IP address in the project						
Port options		IP address: 192 168 151 95						
Time synchronization								
		Subnet mask: 255 . 255 . 0						
	1	Use router						
	•	Router address: 0 . 0 . 0 . 0						
	-	O IP address is set directly at the device						
	PROFINET							
		PROFINET device name is set directly at the device						
		Generate PROFINET device name automatically						



Click on the Line PLC\_1 [CPU 1212C AC/DC/Rly] and click on the button Download to device.

A Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet									
Project Edit View Insert Online Options Tools	Project Edit View Insert Online Options Tools Window Help								
📑 🎦 🖬 Save project 💄 🐰 🏥 🗊 🗙 🍤 🛨 (🍽	📑 🔁 🔚 Save project ا 🐰 🗓 👔 🗶 🏷 🛨 🍽 ± 📢 🖳 🎼 🖳 🧖 Go online 🖉 Go offline 🛔 🖪 🖪 🛠 🚍 💷 o								
Project tree 🔲 🖣	S7-1200 1020 with Profinet  PLC_1 [CPU 1212C AC/DC/Rly]								
Devices									
E 10 10 10 10 10 10 10 10 10 10 10 10 10	🔐 PLC_1 [CPU 1212C] 🔽 📰 🔛 🕼 💷 🛄 🍳 ±								
orks									
💈 🔻 📋 S7-1200 1020 with Profinet	ê c								
🚆 🎽 Add new device	a e o								
🚆 🚠 Devices & networks	n po n								
🖁 🔻 📊 PLC_1 [CPU 1212C AC/DC/Rly]	ž <sup>a</sup>								
Device configuration									
Online & diagnostics									
Program blocks									

Select the interface that the PLC is connected to and click on Start search.

Extended do	ownload to	device					×	
		Configured access nod	es of "PLC_1"					
		Device	Device type	Slot	Interface type	e Address	Subnet	
_		PLC_1	CPU 1212C AC/D	1 X1	PN/IE	192.168.151.95	PN/IE_1	
		Type of the PG/PC interface: PG/PC interface: PG/PC interface: Imm Intel(R) Ethernet Connection I217-LM						
		Conne	ection to interface/su 1st gat	ibnet: eway:	Direct at slot '	I X1'	<ul> <li>▼</li> <li>▼</li> </ul>	
		Select target device:				Show all compatible	devices 💌	
		Device	Device type	Interf	ace type 🛛 🗛	ddress	Target device	
Flash L	ED	-		PN/IE	A	ccess address	-	
Online status information:					<u>S</u> tart search			
						Load	<u>C</u> ancel	
						Load	<u>C</u> ancel	



When the PLC is found click on Load. (The example below already had the correct IP address. When the PLC doesn't have an IP address yet, the MAC Address is shown.)

	Device	Device type	Slot	Interface type	Address	Subnet	
<b>—</b>	PLC_1	CPU 1212C AC/D	1 X1	PN/IE	192.168.151.95	PN/IE_	1
		Type of the PG/PC inter	face:	PN/IE		•	-
		Connection to interface/su	bnet:	Direct at slot '1.	x1'		□ ♥ ⊑ 7 (†)
		1st gate	eway:				
1.000	Select target devi Device PLC_1 	CPU 1212C AC/D	Interfa PN/IE PN/IE	ice type Add 192 Acc	Show all compatible o dress 2.168.151.95 cess address	Target devi PLC_1 	ice
<b>a</b>							
Flash LED							
☐ Flash LED nline status informatic 로 Connection establi Scan completed. 1	n: ;hed to the device wi compatible devices (	ith address 192.168.151.99	5. nd.	(	Display only error m	<u>S</u> tart essages	search



The configuration will compile.

Load pr	eview				×
2	Compil	ing before download	ing to device		
Statur	1	Target	Mercane		Action
+1	<b>S</b>	PLC_1	Ready for loading.		Load 'PLC_1'
		Prepare	download to device.		_
		0	Compiling configuration		
		V	Compliing configuration		
			checking consistency		
				Canc	el
<					>
					Refresh
				Finish	Load Cancel

Click on Load to download the configuration into the PLC. When completed click on Finish.

Status	!	Target	Message	Action
Ψ	<u>~</u>	▼ PLC_1	Ready for loading.	Load 'PLC_1'
	4	<ul> <li>Protection</li> </ul>	Protection from unauthorized access	
	A		Devices connected to an enterprise network or directly to the internet must be appropriately protected against unauthorized access, e.g. by use of firewalls and network segmentation. For more information about industrial security, please visit http://www.siemens.com/industrialsecurity	
	0	Stop modules	The modules are stopped for downloading to device.	Stop all 💌
	0	Device configurati	Delete and replace system data in target	Download to device
	0	Software	Download software to device	Consistent download
<			101	>



### Add the GSDML file to the project

Click on Options and click on Manage general station description files (GSD).



Select the folder with the GSDML file for the 1020, select the file and click on Install.

	ption files			×
Installed GSDs GSDs in t	the project			
Source path: C:\Users\mrossu	m\Desktop\1020	0 PN\GSDML		
Content of imported path				
File	Version	Language	Status	Info
GSDML-V2.35-PENKO-1020-202	0 V2.35	English	Not yet installed	PROFINET IO
				>
			Delete	tall Cancel

The file will be installed.





The installation result is shown, click on Close.

Manag	ge general station description files		×
Insta	allation result		
1 M	fessage		
0	Installation was completed successfully.		
	· · · ·		
	Save log Install additiona	l files	Close

The hardware catalog will be updated.





# **Devices & networks**

Double click on Devices & networks in the left column. It will show the PLC in the network.



Go to the right column and select the Penko 1020 Profinet file in the Hardware catalog. Follow the path:

Other field devices - PROFINET IO - I/O - Penko Engineering B.V. - PNS

020 with Profinet\S7-1200 1020 with Profinet	_ # X
elp	Totally Integrated Automation
🕽 🖳 💋 Go online 🖉 Go offline 🎄 🖪 🖪 🗱 🗶 😑 🚹 <earch in="" project=""> 🙀</earch>	PORTAL
S7-1200 1020 with Profinet → Devices & networks	Hardware catalog 🔹 🖬 🗈 🕨
	Ontions
Network	
	✓ Catalog Same Same Same Same Same Same Same Same
	MI MI 🕺
	Filter Profile: Calla
CPU 1212C	
	PC systems
	Drives & starters     O
	Network components
	Detecting & Monitoring
	Distributed I/O
	Power supply and distribution
	Field devices
	👻 🔟 Other field devices
	Additional Ethernet devices
	▼ 🛄 PROFINET IO 6
	Drives
	Encoders
	Gateway
	▼ 10 10 10 10 10 10 10 10 10 10 10 10 10
	✓ Im Penko Engineering B.V.
	▼ U PNS
	Penko 1020 Protinet
1 I	



Double click on Penko 1020 Profinet to add the 1020 into the network.

020 with ProfinettS7-1200 1020 with Profinet	_ # 2
elp 2 🖳 💋 Goonline 🖉 Gooffline 🛔 🖪 🖪 🗶 🖃 🖬 Search in projects 🎄	Totally Integrated Automation PORTAL
S7-1200 1020 with Profinet > Devices & networks	Hardware catalog 🖉 🛙 🕨
	F To Options
💦 Network 🔡 Connections HM connection 💌 💆 🐫 🔛 🔲 🍳 ±	
	✓ Catalog
	in the last
PLC 1 1020	Filter Profile: Alla
CPU 1212C Penko 1020 Pro DP-NORM	Controllers
Not assigned	> 🛅 HMI
	De De Systems
	Drives & starters
	Image: Imag
	Detecting & Monitoring
	Distributed I/O
	Power supply and distribution
	Field devices
	👻 🛅 Other field devices
	Additional Ethernet devices
	▼ m PROFINETIO
	Drives
	Encoders L
	▶ 🛄 Gateway
	▼ 10
	Penko Engineering B.V.
	▼ III PNS
	Penko 1020 Profinet
	Penko SGM Profinet
	L Sensors
1	PROFIBUS DP

As you can see the 1020 is not assigned yet. Click on Not assigned and select the PLC\_1.PROFINET interface\_1

1	020 with Profinet\S7-1200 1020 with Profinet
н	lelp
lí	🕻 🖳 🙀 Go online 🖉 Go offline 🛛 👫 🖪 🖪 🧩 🔚 🛄 <search in="" project=""> 📲</search>
1	S7-1200 1020 with Profinet > Devices & networks
•	Network 🔛 Connections HMI connection 💌 过 🖽 🛄 🔍 ±
	PLC_1 1020
	CPU 1212C Penko 1020 Pro DP-NORM
	Not assigl Select IO controller
	PLC_1.PROFINET interface_1
	PLC_1.PROFINET in terface_1



PENKO How to...

How to connect a 1020 Profinet to a Siemens PLC

The 1020 is now assigned to PLC\_1.

20 with Profinet\S7-1200 1020 with Profinet	
elp	
🖳 🙀 💋 Go online 🖉 Go offline   🏦 📭 📭 🗶 🖃 🛄 <search in="" project=""></search>	
S7-1200 1020 with Profinet > Devices & networks	
Network 🔡 Connections HMI connection 💌 过 🖽 🛄 🔍 ±	
PLC_1 1020	
PLC 1	
□ = = PLC_1.PROFINETIO-Syste	

You can give the 1020 a different name and IP address if you want. Double click on the 1020 module.





Double click on the green square in the 1020 module.

10	020 with Profinet\S7-1200 1020 with Profinet
н	elp
lî	📲 📓 💋 Go online 🖉 Go offline  🋔 🖪 🖪 🧏 🚽 🔲 <earch in="" project=""> 👫</earch>
1	S7-1200 1020 with Profinet ► Ungrouped devices ► 1020 [Penko 1020 Profinet
·	🔐 1020 [Penko 1020 Profinet] 🔽 🕎 🕎 🔛 🔝 💷 🔍 生
I	
	1020
	DP-NORM

Under Ethernet Addresses you can set an IP address and set a different Profinet device name when you uncheck the option Generate PROFINET device name automatically.

eneral IO tags Syst	tem constants Texts			
eneral	Subnet:	PN/IE_1		
Catalog information		Add new subnet		
OFINET interface [X1]				
General	IP protocol			
Ethernet addresses	ii piotocoi			
Advanced options	IP address:	192 168 151 97		
Interface options	Cubert model			
Media redundancy	Subnet mask:	255.255.255.0		
Real time settings		Synchronize router settings with IO controller		
Port 1 [X1 P1 R]		Use router		
Port 2 [X1 P2 R]	Router address:			
entification & Maintenance		0.0.0.0		
	PROFINET PROFINET device name: Converted name: Device number:	Generate PROFINET device name automatically Penko1020 penko1020 1		
PENKO an ETC Company				

Go back to Network view by clicking on the network button.

020 with Profinet\S7-1200 1020 with Profinet
elp
🖳 🛃 💋 Go online 🖉 Go offline   🕌 🕞 🚛 🛠 🖃 🛄 🤇earch in project>
S7-1200 1020 with Profinet > Ungrouped devices > 1020 [Penko 1020 Profinet]
🔠 1020 [Penko 1020 Profinet] 💌 🖽 🗱 🔚 🛄 🔍 🛨
1020
DP-NORM

When the Profinet interface is selected you can click on the button Name.

PENKO

an ETC Company

-1200 1	020 with Profinet\S7-1200 1020 with Profinet
idow H	telp
6 🛄 🛙	î 🖳 🙀 💋 Go online 🖉 Go offline 🛛 🛔 🖪 🖪 🚼 🔄 🛄 <search in="" project=""> 🛛 🙀</search>
	S7-1200 1020 with Profinet > Devices & networks
•	Network 🔡 Connections HMI connection 🔽 🔡 🖽 🛄 🔍 ±
	PLC_1 1020
	PLC_1.PROFINET IO-Syste
	PLC_1.PROFINET IO-Syste

Select the name that you have given to the 1020 at the PROFINET device name and set the correct interface, then click on Update list.

Assign PROFINET device	name.					×
		Configured PRO	FINET de	vice		
		PROFINET devic Dev	e name: ice type:	penko1020 Penko 1020 Profinet		
		Online access Type of the PG/PC in PG/PC in	nterface: nterface:	PN/IE	onnection I217-LN	
Ļ		Device filter				
□ <b>□</b>		🛃 Only show	devices of	the same type		
		Only show	devices wit	th bad parameter setti	ngs	
		Only show	devices wit	thout names		
	Accessible dev	ices in the network:				
	IP address	MAC address	Device	PROFINET device na	me Status	
<b>L _</b>						
Flash LED						
	<			1111		>
					Update list	Assign name
Online status information	:					
Search completed	. 0 of 0 devices w	ere found.				
<			1111			>
						Close



The 1020 is found but it has no IP address and a different PROFINET device name.

Assign PROFINET device	name.				_			×
-		Configured PRO	FINET devi	ice				
		PROFINET devic	e name:	penko1020			•	
		Dev	ice type:	Penko 1020 Pro	finet			
		Online access						
	Type of the PG/PC interface:		🖳 PN/IE 💌			-		
	PG/PC i	nterface:	💹 Intel(R) Ether	net Connecti	ion I217-LM	7-LM 💌 🖲 🖪		
		Device filter						
		🛃 Only show	devices of th	e same type				
		Only show	devices with	bad parameter	settings			
		Only show	devices with	outnames				
	Accessible devi	ces in the network:						
	IP address MAC address Device PROFI				PROFINET device name Status			
	0.0.00	00-02-A2-50-02-21	1020 Mo	1020	4	Device name	e is different	
Flash LED								
	<			1111				
					Upda	ate list	Assign name	
Online status information:								
<ol> <li>Search completed.</li> </ol>	0 of 0 devices we	ere found.						
<ol> <li>Search completed.</li> </ol>	1 of 3 devices we	ere found.						
<u> </u>								
								_
							Close	



Select the line with the 1020 and click on Assign name.

Assign PROF	INET device	name.							×
			Configured PRO	FINET dev	ice				
			PROFINET devic	e name:	penko1020			-	
			Dev	/ice type:	Penko 1020 Profine	et			
			Online access						
			Type of the PG/PC i	nterface:	PN/IE			-	
			PG/PC i	nterface:	Intel(R) Ethernet	t Connecti	on 1217-LM		1
									<u>.</u> ]
			Device filter						
			🛃 Only show	devices of th	ne same type				
			Only show	devices with	bad parameter se	ttings			
			Only show	devices with	out names				
		Accessible devi	ses in the network						
	_	IP address	MAC address	Device	PROFINET device r	name	Status		
		0.0.0.0	00-02-A2-50-02-21	1020 Mo	1020	1	Device name	e is different	
Flash L	.ED								
		<							>
					L	Upda	ite list	Assign nam	e
Online statu	is information:								
Sear	ch completed.	1 of 3 devices we	re tound. re found						
• • • •									
<									>
								Close	



The name is now updated and the status is OK, the IP address will be assigned when the configuration is downloaded to the PLC. Close the window.

Assign PROFINET device i	name.					×
		Configured PRO	FINET devi	ice		
		PPOFINET devic	e name:	penko1020		
	Dev	vice type:	Penko 1020 Profinet			
		0	51 [			
	Unline access	nterface	DN/IE		-	
	sc/eci	nterface.		antion 1217 114		
		ranci	intenace.	nter(k) Ethemet Conn	ection 1217-LM	
		Device filter				
		🛃 Only show	devices of th	e same type		
		Only show	devices with	bad parameter settings		
		Only show	devices with	outnames		
	An and a first second					
	IP address	MAC address	Device	PROFINET device name	Status	
	0.0.0.0	00-02-A2-50-02-21	1020 Mo	penko1020	ОК	
Flash LED						
	<		-			>
				U	Ipdate list	Assign name
Online status information:						
Search completed. (	0 of 0 devices we	ere found.				
Search completed.	1 of 3 devices we	ere found.		10C address \$00.02.02.5	0.02.21	
	ename penkon	020 was successfully	assigned to N	which address 00-02-A2-50	0-02-21.	
<			1111			>
						Close



Select the line PLC\_1 [CPU 1212C AC/DC/Rly] and click on download to device and follow the download steps.

Siemens - C	:\Users\mrossum\Documents\Automation\S7	-1200 102	0 with Profinet	S7-1200 1020 v	with Profinet		
Project Edit 🕚	View Insert Online Options Tools Wind project 昌 🐰 🗎 🗎 🗙 🏷 🛨 🍽	dow Help	p 🖳 🙀 💋 Goo	online 🔊 Go off	fline 🔐 📭 📑	🗴 📑 🛄 <earch in="" project<="" th=""><th>&gt;</th></earch>	>
Project tree			67-1200 1020 v	with Profinet	Devices & netw		
Devices	]						
Ē		🗏 🔂 🗐	Network	Connections H	MI connection	🔽 🕮 🖽 🛄 🔍 ±	
orks						,,,,,	
🛓 🔻 🛅 S7-1200	1020 with Profinet						
🖁 📑 🛃	new device						
👋 📩 Devi	ces & networks		PLC_1	_	1020	and the second se	
🕴 🔻 🧾 PLC_	1 [CPU 1212C AC/DC/Rly]		CPU 1212C		Penko 1020 Pro	DP-NORM	
a 🚺 🚺	evice configuration			<b>T</b>	PLC_1		
🔶 🖳 😨 o	nline & diagnostics						
🕨 🕨 😹 P	rogram blocks			PLC 1	PROFINET IO-Syste		
📕 🕨 🙀 Ti	echnology objects					<u></u>	
🕨 🕨 🖬 E	xternal source files						

To check the IP address double click on Devices & networks and double click on the 1020 module.

K Siemens - C:\Users\mrossum\Documents\Automation\S7-1200	1020 with Profinet\S7-1200 1020 with Profinet											
Project Edit View Insert Online Options Tools Window	Help											
📑 🔁 💀 Save project 💄 🐰 🏥 🗊 🗙 🏷 🛨 (4 ± 🖥 🛄 )	📑 🔁 🔒 Save project 💄 🐰 🗐 🛱 🗶 🏷 ± (주 ± 🖥 🗓 🕼 🖳 🕼 🖉 Go online 🖉 Go offline 🎄 🖪 🕼 🛠 🚍 🛄 <rr></rr>											
Project tree	S7-1200 1020 with Profinet > Devices & networks											
Devices												
	💦 Network 🔢 Connections 🛛 HMI connection 💌 🕮 🖽 🛄 🔍 🛨											
ska												
2 S7-1200 1020 with Profinet												
🚆 📑 Add new device												
Devices & networks	PLC_1 1020											
🗧 🔻 📊 PLC_1 [CPU 1212C AC/DC/Rly]	CPU 1212C Penko 1020 Pro DP-NORM											
Device configuration	PLC_1											
Online & diagnostics												
🕨 🔂 Program blocks	DLC 1 DROEINET IO Syste											
Technology objects	rec_r.r.orinerio-syste											
External source files												

Select the module and click on Name.



Click on Update list and the 1020 is now showing the correct IP address. Click on Close.

Assign PROFINET device	name.					×							
		Configured PRO	FINET dev	ice									
		PROFINET devic	e name:	penko1020		•							
		Dev	vice type:	Penko 1020 Profinet									
		Online access											
		Type of the PG/PC i	nterface:	PN/IE		•							
		PG/PC i	nterface:	💹 Intel(R) Ethernet Conn	ection I217-LM	• •							
		Device filter											
		🛃 Only show	devices of th	ie same type									
	Only show devices with bad parameter settings												
		Only show	devices with	out names									
	Assessible devices in the network:												
	IP address	MAC address	Device	PROFINET device name	Status								
	192.168.151.97	00-02-A2-50-02-21	1020 Mo	penko1020	🕑 ок								
Electron (CD)													
- Hash LED													
	<				a da ta Bat								
					pdate list	Assign name							
Online status informations													
Search completed	1 of 3 devices were	e found.											
		- Iounu:											
<						>							
						Close							

You should now also see the Device overview, here you can see the data that you can read and write. These I addresses and Q addresses can differ if you have a different PLC or already have added different modules.

• 1020 [Penko 1020 Profinet] 💌	II 🗹 🍊 II 🔍 ±	De	vice overview					a ropology view	D NEWOK VIEW	Device view
		- <u></u>	Module	Rack	Slot	I address	Q address	Туре	Article number	Firmware
			▼ 1020	0	0			Penko 1020 Profinet	1020Profinet	V5.01.04
		=	PNHO	0	0 X1			1020		
1020			Weigher Input Module_1	0	1	6886		Weigher Input Module		
			Remote Command Module_1	0	2	8792	6475	Remote Command Module		
			Inputs Outputs Markers Module_1	0	3	93104	/679	Inputs Outputs Markers Module		
			Diagnostics Module_1	0	4	105112		Diagnostics Module	_	
				0	5					
•	DP-NORM			0	7					
				0	8					
				0	9					
				0	10					
				0	11					
		ž		0	9 10 11					

#### **PLC Tags**

Add a new tag table by opening PLC\_1 [CPU 1212c AC/DC/Rly] – PLC Tags and double click on Add new tag table.



A new tag table is added to the project.

鳽	Siemens - C	:\Users\mrossum\Documents\/	Automation\S7-1200 1	020 with Profinet\S7-	1200 1020 with	n Profinet
Pr	oject Edit V	view Insert Online Option	s Tools Window H	elp		
	🛉 📑 🔚 Save	project 블 🐰 🗓 🗎 🗙 🖣	ຈະ 🖓 ະ 🗟 🛄 🗓	] 🖳 📓 💋 Go onlin	e 🖉 Go offline	45 📭 💶
	Project tree			\$7-1200 1020 with	n Profinet 🕨 U	Ingrouped dev
	Devices					
	- Tří		■	🏦 1020 [Penko 10	20 Profinet] 💌	🖽 🖭 🍊
orks			·;	:		
two	🔻 🗋 \$7-1200	1020 with Profinet				
e ne	📑 Add	new device				
8	n Devi	ces & networks			20	
<u>ë</u> .	🔻 🛅 PLC_	1 [CPU 1212C AC/DC/Rly]			101	
l a	🛛 🕅 D	evice configuration				
	<u>v</u> 0	nline & diagnostics				
	🕨 🕨 🔜 Pi	rogram blocks				
	🕨 🕨 🙀 Te	echnology objects				
	🕨 🕨 🔚 E	xternal source files				DP
	🔻 🔙 Pi	LC tags			_	_
		Show all tags				
		🛉 Add new tag table				
	1	🖌 Default tag table [27]				
	Ψ.	Tag table_1 [0]				
	🕨 🕨 🕅	LC data types				
	🕨 🕨 🗎	/atch and force tables				



Right click on the Tag table and click on Rename.

٦A	Siemens - C:\U	sers\mrossum\Docume	nts\Autor	mation\\$7-1200	1020	with Profinet\S7-1	200 1020 wi	th Profinet
Pr	oject Edit Vie	w Insert Online Op	otions T	ools Window	Help			
	i i 📑 📑 Save pro	oject 💻 🗶 🗈 🗈	x 🖣 ±	C ± 🖥 🔃	In 🛄	🔜 💋 Go online	Go offlir	ie 🎝 🖪 🖪
_	Project tree				1 57	1200 1020 with	Profinat N	
	Floject tiee				57-	1200 1020 With	FIOTHEL	ongrouped dev
	Devices				_			
	Es				' 🔐	1020 [Penko 102	0 Profinet]	- 🖽 🕎 🖌
ska								
ž.	🔻 📋 S7-1200 10	20 with Profinet						
Ĕ	📑 Add nev	v device						
ŝ	d Devices	& networks					20	
į,	▼ 📑 PLC_1 [	CPU 1212C AC/DC/Rly]					NO.	
De	🛛 Devi	ce configuration						
	V Onlin	ne & diagnostics						
	Frog	nam blocks						
	Exte	rnal source files						DP-
	V 🛵 PLC	tags						_
	🦷 🤤 s	how all tags						
	📫 A	dd new tag table						
	💥 C	efault tag table [27]						
		Open		]				
	PLC	Max						
	Vate	A Cut	Ctrl+X					
	Onli	Paste	Ctrl+V					
		N Delate	Del					
	En PLC	Rename	E2					
	Loca	Compile						
	🕨 🧰 Dist	Complie Download to device						
	🕨 🖳 Ungrou	Go online	Ctrl+K					
	🕨 🛃 Security	🛃 Go offline	Ctrl+M					
	🕨 🙀 Commo	Start simulation Ctrl	+Shift+X					
	🕨 🧾 Docum							
	Langua		•					
	Cord Product	Search in project	Ctrl+F		<			> 100%
	<ul> <li>Card Reade</li> </ul>	Cross-references	F11					

Give the Tag a name, in the example the name Weigher Input Module is used. Look at the I Addresses the range is 68-86 in the example but it can differ in your project.

020 with Profinet\\$7-1200 1020 with Profinet										L # X
elp B 🔛 🙀 💋 Go online 🖉 Go offline 🧦 🖪 🖪 🔀 🔀 🛨 🛄 <earch in="" proje<="" th=""><th>ect⊳</th><th>'n</th><th></th><th></th><th></th><th></th><th></th><th>Totally Integ</th><th>rated Automation PORT</th><th>AL</th></earch>	ect⊳	'n						Totally Integ	rated Automation PORT	AL
\$7-1200 1020 with Profinet ➤ Ungrouped devices ➤ 1020 [Penko 1020	) Profin	et]							_ • •	× <
							🚪 Topology view	🛔 Network view	Device view	
🏕 1020 [Penko 1020 Profinet] 💌 🔛 🕎 🔛 🛄 🍳 ±	I 🗌	Device overview								Har
	^	W Module	Rack	Slot	I address	Q address	Туре	Article number	Firmware	dwar
		▼ 1020	0	0			Penko 1020 Profinet	1020Profinet	V5.01.04	<u>^</u> °
	=	▶ PN-IO	0	0 X1			1020			
1009		Weigher Input Module_1	0	1	6886		Weigher Input Module			g
<b>V</b>		Remote Command Module_1	0	2	8792	6475	Remote Command Module			
		Inputs Outputs Markers Module_1	0	3	93104	7679	Inputs Outputs Markers Module			
		Diagnostics Module_1	0	4	105112		Diagnostics Module			8
			0	5						= =
DP.NOPM			0	6						ine
			0	7						5
			0	8						
			0	9						
	1		0	10						
	- 2		0	11						



Double click on the Weigher Input Module to open the tags.

٦ß	脑 Siemens - C:\Users\mrossum\Documents\Automation\\$7.1200 1020 with Profinet\\$7.1200 1020 with Profinet										
Pr	roject Edit View Insert Online Options Tools Window H	elp									
	🛉 🎦 📮 Save project 📕 🐰 🗎 🗎 🗙 🍤 🛨 (주 生 🖥 🛄 🚺	1 🖳 🔹	🖡 💋 Go online 💋 Go offline	🌆 🖪 🖪 🗶 🗄	search	in project>	R.				
	Project tree 🔲 🖣	<b>\$7-12</b>	00 1020 with Profinet 🔸 F	LC_1 [CPU 1212C AC	/DC/Rly] > PL	C tags 🔸	Weigher	r Input N	lodule [l	D]	
	Devices										
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<b>#</b>	) 🗗 🕂 📽 🛍								
		We	igher Input Module								
÷.	<ul> <li>S7-1200 1020 with Profinet</li> </ul>		Name	Data type	Address	Retain	Acces	Writa	Visibl	Comment	
	Add new device	1	<add new=""></add>				<ul> <li>Image: A start of the start of</li></ul>	<b>V</b>	<ul> <li>Image: A set of the set of the</li></ul>		
5	Devices & networks										
	PLC_1 [CPU 1212C AC/DC/Rly]										
提	T Device configuration										
	😼 Online & diagnostics										
	Program blocks										
	Technology objects										
	External source files										
	🔻 🚂 PLC tags										
	lange Show all tags										
	🚔 Add new tag table										
	🎬 Default tag table [27]										
	🖳 Weigher Input Module [0]										
	PLC data types										
	Watch and force tables										
	🕨 📴 Online backups										
	Device proxy data										
	Program info										
	PLC alarm text lists										
	Local modules										
	a Data da Carta da Ca					_	_	_	_		

Add the following tags and set the Data type and address.

,HA	Siemens - C:\Users\mrossum\Documents\Automation\S7-12001	020 w	ith Pr	ofinet\S7-1200 1020 with Profir	net					
Pr	oject Edit View Insert Online Options Tools Window H	elp								
E	출 📑 🔚 Save project 🔳 🐰 🤖 🛍 🏹 🗙 🌎 🛨 (레 노 🐻 🛄 🏌		RT 💋	🍯 Go online 📓 Go offline   🏭	🖪 🖪 🗶 📃	Search in g	project>	Ε.		
	Project tree 🔲 🖣	<b>\$7-1</b>	200	1020 with Profinet   PLC_1 [	CPU 1212C AC/	DC/Rly] ▶ PLC t	ags ▶ '	Weigher	Input M	odule [1
	Devices						-	-		
				1 ET 00 EN						
_		- 1		er lanut Madula						
ļ	▼ 3 57 1200 1020 with Profinet	, v	vergn		Data tura	A didaaa	Detaile	0	10/100	A GLOBAL
	Add new device	1		1020 Nett	Data type	Address	Retain	Acces	vvrita	VISIDI
a B	Pavisos & networks	1		1020_Nett	Dint	%ID08				
2		2		1020_Gross	Dint	%ID72				
ų		3	-	1020_lare	Dint	%ID76				
E.		4	1	1020_Preset_lare	Dint	%1080				
	Branner blanks	5		1020_weight_is_valid	BOOI	%184.0				
	Program blocks	6		1020_Stable_Weight	BOOL	%184.1				
	Icchnology objects	7		1020_Nett_Weight	Bool	%184.2				
	External source files	8		1020_Center_Of_Zero	Bool	%184.3				
	PLC tags	9		1020_Zero_ls_Set	Bool	%184.4				
	a Show all tags	10		1020_Bit_5_Reserved	Bool	%184.5				
	Add new tag table	11	-	1020_Command_Is_Ready	Bool	%184.6		<b></b>	<b></b>	<b></b>
	🍯 Default tag table [27]	12		1020_Command_Is_In_excecu	Bool	%184.7		<b></b>	<b></b>	<b></b>
	🍇 Weigher Input Module [14]	13	-	1020_Decimal_Point	Byte	%IB85				
	Description: De	14		1020_Range	Byte	%IB86			<b></b>	<b>~</b>
	Watch and force tables	15		<add new=""></add>	<b>I</b>			<b>V</b>	<b>V</b>	<b>V</b>
	🕨 📴 Online backups									



Download the tags into the PLC by clicking on the Download to device button. And follow the download steps.

HA	I Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet											
Pr	oject Edit View Insert Online Options Tools Window H	elp										
1	🛉 📑 🔒 Save project 📕 🐰 🏢 📬 🗙 🍋 🛨 (주 🛨 🐻 🛄 👔		R 🔎	🖌 Go online 🖉 Go offline 🛛 🛔	<b>.</b> . ×	😑 💷 Search	in project>	<b>.</b>				
	Project tree	<b>\$7-1</b>	200 1	1020 with Profinet  ▶ PLC_1 [	CPU 1212C A	C/DC/Riy] ► PL	C tags 🕨	_ Weigher	Input M	odule [1		
	Devices											
		<u></u> ≝* :										
l i	F	N	/eighe	er Input Module								
	S7-1200 1020 with Profinet		N	lame	Data type	Address	Retain	Acces	Writa	Visibl		
l e	Add new device	1	-	1020_Nett	Dint	%ID68		<b>~</b>	<b></b>	<b></b>		
5	💑 Devices & networks	2		1020_Gross	DInt	%ID72		<b></b>	<b></b>			
L.	PLC_1 [CPU 1212C AC/DC/Rly]	3		1020_Tare	DInt	%ID76		<b></b>				
Ĕ	T Device configuration	4		1020_Preset_Tare	DInt	%ID80		<b>~</b>	<b></b>			
	😼 Online & diagnostics	5		1020_Weight_Is_Valid	Bool	%184.0		<b></b>				
	Program blocks	6	-00	1020_Stable_Weight	Bool	%184.1		<b></b>				
	Technology objects	7	-	1020_Nett_Weight	Bool	%184.2						
	External source files	8	-	1020_Center_Of_Zero	Bool	%184.3						
	🔻 🛺 PLC tags	9	-	1020_Zero_Is_Set	Bool	%184.4						
	lange Show all tags	10	-	1020_Bit_5_Reserved	Bool	%184.5						
	💕 Add new tag table	11	-	1020_Command_Is_Ready	Bool	%184.6						
	🝯 Default tag table [27]	12	-	1020_Command_Is_In_excecu	Bool	%184.7						
	Imput Module [14]	13	-	1020_Decimal_Point	Byte	%IB85						
	▶ 💽 PLC data types	14	-	1020_Range	Byte	%IB86						
	Watch and force tables	15		<add new=""></add>								
	~											

Click on Monitor All.

🚻 Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet											
oject Edit View Insert Online Options Tools Window H	elp										
📑 🔚 Save project 📒 🐰 🇉 🏦 🗙 🏷 ± (레 ± 🔒 🛄 🏌	1 🛄	RT .	ダ Go online 📓 Go offline 🛛 🏭	<b></b> × -	<searc< td=""><td>h in project&gt;</td><td><b>B</b>.</td><td></td><td></td></searc<>	h in project>	<b>B</b> .				
Project tree 🔲 🖣	<b>\$7-1</b>	200	1020 with Profinet  PLC_1	CPU 1212C AC	/DC/Rly] 🕨 P	LC tags 🔸	Weigher	Input M	odule [1		
Devices											
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	٠	* [	🗎 🕂 🙄 🛍								
	v	Veigh	ner Input Module								
<ul> <li>S7-1200 1020 with Profinet</li> </ul>			Name	Data type	Address	Retain	Acces	Writa	Visibl		
🍟 Add new device	1	-	1020_Nett	DInt	%ID68			<b></b>			
n Devices & networks	2		1020_Gross	DInt	%ID72		<b></b>	<b></b>	<b></b>		
PLC_1 [CPU 1212C AC/DC/Rly]	3		1020_Tare	DInt	%ID76		<b></b>	<b></b>	<b></b>		
III Device configuration	4	-00	1020_Preset_Tare	DInt	%ID80		<b></b>	<b></b>	<b></b>		
😮 Online & diagnostics	5	-00	1020_Weight_Is_Valid	Bool	%184.0		<b></b>	<b></b>	<b></b>		
🕨 🔙 Program blocks	6	-	1020_Stable_Weight	Bool	%184.1			<b></b>	<b></b>		
🕨 🙀 Technology objects	7	-	1020_Nett_Weight	Bool	%184.2			<b></b>	<b></b>		
External source files	8	-	1020_Center_Of_Zero	Bool	%184.3		Image: A start and a start	<b></b>	<b></b>		
🔻 🚂 PLC tags	9		1020_Zero_Is_Set	Bool	%184.4			<b></b>	<b></b>		
🍇 Show all tags	10	-	1020_Bit_5_Reserved	Bool	%184.5			<b></b>	<b>~</b>		
📑 Add new tag table	11	-	1020_Command_Is_Ready	Bool	%184.6				<b></b>		
🍯 Default tag table [27]	12	-	1020_Command_ls_in_excecu	Bool	%184.7				<b></b>		
Search and the search	13	-	1020_Decimal_Point	Byte	%IB85			<b></b>	<b></b>		
PLC data types	14	-	1020_Range	Byte	%IB86			<b></b>	<b></b>		
Watch and force tables	15		<add new=""></add>				<b>V</b>	<b>V</b>	<b>V</b>		
	Siemens - CAUsers/mrossum/Documents/Automation/S7-1200 1 oject Edit View Insert Online Options Tools Window H	Siemens       - CAUsers/mrossum/Documents/Automation/S7-1200 1020 w         oject       Edit       View       Insert       Online       Options       Tools       Window       Help         Image: Save project       Image: Save p	Siemens       - CAUsers/mrossum/Documents/Automation/S7-1200 1020 with P         oject       Edit       View       Insert       Online       Options       Tools       Window       Help         Image: Save project       Image: Sa	Siemens       - CAUsers/mrossum/Documents/Automation/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet         image: State project       image: Stat	Siemens       - CAUsers/mrossum/Documents/Automation/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet         oject       Edit       View       Insert       Online       Options       Tools       Window       Help         Image: Solution of the service of	Siemens       - CAUsers/mrossum/Documents/Automation/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet         oject       Edit       View       Insert       Online       Options       Tools       Window       Help         Image: Solution of the	Siemens - C:Usershmrossum/Documents/Automation/S7-1200 1020 with Profinet         oject Edit View Insert Online Options Tools Window Help         Image: Signal Sig	Stemens - C:Users'Introssum/Documents/Automation/S7-1200 1020 with Profinet/S7-1200 1020 with Profinet         oject Edit View Insert Online Options Tools Window Help         Image: Stemens - C:Users'Introssum/Documents/Automation/S7-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher         Project tree       Image: Stemens - C:Users'Introssum/Documents/Automation/S7-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher         Devices       Image: Stemens - C:Users'Introssum/Documents/Automation/S7-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input Module         * 57-1200 1020 with Profinet       Image: Stemens - C:Users'Introssum/Documents/Stemens - C:Users'Introssum/Stemens - C:Users'Intres'Introssum/Stemens - C:Users'Introssum/Stemens - C:U	Siemens - CAUSers/mrossum/Documents/Automation/S7-1200 1020 with Profinet oject Edit View Insert Online Options Tools Window Help Project ree S7-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M Devices Weigher Input Module - 57-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M Weigher Input Module - 57-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M Weigher Input Module - 57-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M Weigher Input Module - 57-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M - 57-1200 1020 with Profinet > PLC_1 [CPU 1212C AC/DC/Rly] > PLC tags > Weigher Input M - 57-1200 1020 with Profinet = 0 Int %ID72 = 0 W - 1020_Tare Dint %ID76 = 0 Ø - 0 Online & diagnostics = 5 @ 1020_Tare Dint %ID76 = 0 Ø - 0 Online & diagnostics = 5 @ 1020_Weight Is_Valid Bool %I84.0 = 0 Ø - 1020_Weight Is_Valid Bool %I84.1 = 0 Ø - 1020_Weight Bool %I84.1 = 0 Ø - 1020_Veight Bool %I84.3 = 0 Ø - 1020_Zero_Is_Set Bool %I84.4 = 0 Ø - 1020_Zero_Is_Set Bool %I84.5 = 0 Ø - 2/dd news = 1020_Command_Is_In_execu Bool %I84.7 = 0 Ø - 2/dd news = 1020_Command_Is_In_execu Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.5 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.5 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_Set Bool %I84.7 = 0 Ø - 2/dd news = 1020_Zero_Is_		



뀖송	📸 Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet											
Р	Project Edit View Insert Online Options Tools Windo	w He	lp									
E	📑 📑 🔚 Save project 📕 🐰 順 🛅 🗙 🏷 ± (색 ± 🐁		민 (	<b>a</b> 1	🖉 Go online 📝 Go offline    🛔	× 🗉	Search in	n project>	E.			
	Project tree		<b>\$7-1</b> 2	200	1020 with Profinet   PLC_1 [	CPU 1212C AC/	DC/RIy] > PLC	tags 🕨	Weigher	Input N	/lodule [1	4]
	Devices											
		1	<b>*</b>	÷ [	→ H 🕾 🖬							
9			w	eigh	er Input Module							
Ē	▼ 📑 \$7-1200 1020 with Profinet			1	lame	Data type	Address	Retain	Acces	Writa	Visibl	Monitor value
E	🗳 Add new device		1	-	1020_Nett	Dint	%ID68					150
b	Devices & networks		2		1020_Gross	Dint	%ID72				<b></b>	379
L a	▼ 1 [CPU 1212C AC/DC/Rly]	<b>~</b> •	3		1020_Tare	Dint	%ID76					229
Ę	Device configuration		4	-	1020_Preset_Tare	Dint	%ID80					0
	😼 Online & diagnostics		5	-	1020_Weight_Is_Valid	Bool	%184.0					TRUE
	Program blocks		6		1020_Stable_Weight	Bool	%184.1					TRUE
	Technology objects		7	-	1020_Nett_Weight	Bool	%184.2					TRUE
	External source files		8	-	1020_Center_Of_Zero	Bool	%184.3				<b></b>	FALSE
	🔻 🚂 PLC tags		9	-	1020_Zero_Is_Set	Bool	%184.4					FALSE
	🍇 Show all tags		10	-	1020_Bit_5_Reserved	Bool	%184.5				<b></b>	FALSE
	🚔 Add new tag table		11	-	1020_Command_Is_Ready	Bool	%184.6				<b></b>	FALSE
	💥 Default tag table [27]		12	-	1020_Command_Is_In_excecu	Bool	%184.7					FALSE
	👆 Weigher Input Module [14]		13	-	1020_Decimal_Point	Byte	%IB85		<b></b>		<b></b>	16#02
	PLC data types		14	-	1020_Range	Byte	%IB86					16#01
	Watch and force tables		15		<add new=""></add>				<ul> <li>Image: A start of the start of</li></ul>		<ul> <li>Image: A start of the start of</li></ul>	

The PLC will go online and the actual values of the 1020 is shown.

To add the other tags and rename them, go offline.

R Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet												
Project Edit View Insert Online Options Tools Window Help												
📑 📴 🛃 Save project 🚇 🐰 🗉 🖆 🗙 🏷 ± 🍽 🗓 🕼 🖉 🕼 🖉 🕼 🖉 🕼 🖉 Go online 📝 Go offline 🏭 🐘 🖪 🐇 🖂 📋 🥧 cearch in pro												
	Project tree			<b>\$7-1200</b>	1020 with Profinet 🕨 P	LC_1 [CPU 1212C #	AC/DC/RIy] 🕨 P	LC tags				
	Devices											
	🔟 🔛 🔛 🛄 🔐 🔮 🔮 🔮 🔛 🖤 🛍											
Ð	Weigher Input Module											
Ē	▼ 📄 S7-1200	1020 with Profinet	🗹 🔵	1	lame	Data type	Address	Re				
Le.	📑 Add n	ew device		1 📲	1020_Nett	DInt	%ID68	E				
5	di Devic	es & networks		2 📶	1020_Gross	DInt	%ID72	0				
a.	👻 🚰 PLC_1	[CPU 1212C AC/DC/Rly]	<b>V</b>	3 🕣	1020_Tare	DInt	%ID76	[				
F	📑 De	evice configuration		4 📲	1020_Preset_Tare	DInt	%ID80					



PENKO How to...

How to connect a 1020 Profinet to a Siemens PLC

Add 3 new tags and rename them as below.

騧	Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1	020							
Pr	oject Edit View Insert Online Options Tools Window H	elp							
	🛉 🕒 🔚 Save project 进 🐰 🏢 🛍 🗙 🏷 ± (주 ± 🖥 🛄 🗓								
	Project tree	\$7							
	Devices								
		-							
-		-							
ŀ	▼ 57-1200 1020 with Profinet								
	Add new device	1							
6	Devices & networks	2							
	▼ PLC_1 [CPU 1212C AC/DC/Rly]								
Ч	Device configuration	4							
	😨 Online & diagnostics	5							
	🕨 🙀 Program blocks	6							
	🕨 🏣 Technology objects	7							
	External source files	8							
	🔻 🚂 PLC tags	9							
	🍇 Show all tags	10							
	📑 Add new tag table	11							
	🍯 Default tag table [27]	12							
	🍓 Diacnostics Module [0]	13							
	🍇 Inputs Outputs Markers Module [0]	14							
	🍇 Remote Command Module [0]	15							
	🌉 Weigher Input Module [14]								
	L PLC data types								

Double click on Remote Command Module and add the tags below.

🏨 Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet												
Project Edit View Insert Online Options Tools Window Help												
📑 📴 🔒 Save project 💄 🐰 🗉 🖆 🗶 🏷 🛨 🖓 🖞 🗓 🕼 🖉 🖉 🖓 🖉 Go online 🖉 Go offline 🎄 🖪 🖪 🗶 🚽 🐼 Search in projector 👫												
Project tree	<b>\$7-1</b>	200	1020 with Profinet   PLC_1	[CPU 1212C A <i>CI</i>	DC/RIy] ▶ PL(	C tags 🕨	Remote	Comma	nd Modu			
Devices												
	<b>1</b>	2 2 E 😌 🕅										
5 E	R	Remote Command Module										
▼ 🔄 \$7-1200 1020 with Profinet		-	Name	Data type	Address	Retain	Acces	Writa	Visibl			
🖥 🎽 Add new device	1	-00	1020_Result_Data	DWord	%ID87		<b></b>		<b></b>			
Devices & networks	2	-	1020_Command_Result_Code	Byte	%IB91				<b></b>			
PLC_1 [CPU 1212C AC/DC/Rly]	3	-	1020_Command_Status	Byte	%IB92				<b></b>			
Device configuration	4	-	1020_Command	DWord	%QD64				<b></b>			
🖳 Online & diagnostics	5	-	1020_Parameter	DWord	%QD68				<b></b>			
🕨 🔙 Program blocks		-	1020_Exchange	DWord	%QD72			<b></b>	<b></b>			
🕨 🙀 Technology objects			<add new=""></add>		]		<b>V</b>	<b>V</b>	<ul> <li>Image: A start of the start of</li></ul>			
External source files												
🔻 📜 PLC tags												
lange Show all tags												
🗳 Add new tag table												
🎬 Default tag table [27]												
liacnostics Module [0]												
linputs Outputs Markers Module [0]												
😓 Remote Command Module [6]												
le Weigher Input Module [14]												
Lee PLC data types												



Kiemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet Project Edit View Insert Online Options Tools Window Help 🞐 🔁 🔜 Save project 💄 🐰 🗐 💼 🗶 🛸 化 🗳 着 🎚 🌆 🖉 🎧 🂋 Go online 🦨 Go online 🛔 原 🕞 🦛 🔧 🖃 🔲 < S7-1200 1020 with Profinet + PLC\_1 [CPU 1212C AC/DC/Rly] + PLC tags + Inputs Outputs Markers Devices E 🥩 🔮 🖻 🖻 📽 🎁 Inputs Outputs Markers Module S7-1200 1020 with Profinet Name Data type Address Acces. Visibl... Retain Writa. 🗳 Add new device 1020\_Inputs DWord %ID93 -00 📩 Devices & networks -1020\_Outputs DWord %ID97 PLC\_1 [CPU 1212C AC/DC/Rly] -00 1020\_Read\_Marker\_401-432 DWord %ID101 T Device configuration 1020\_Write\_Marker\_969-1000 DWord %OD76 -00 & Online & diagnostics  $\checkmark$ <Add news 🕨 🔜 Program blocks 🕨 🙀 Technology objects External source files 🔻 🛃 PLC tags lags 🖏 Show all tags 🍟 Add new tag table 💥 Default tag table [27] liacnostics Module [0] 👆 Inputs Outputs Markers Module [4] 👆 Remote Command Module [6] 🍇 Weigher Input Module [14] PLC data types

Double click on Inputs Outputs Markers Module and add the tags below.

Double click on Diagnostic Module and add the tags below.

Hê	🚻 Siemens - C:\Users\mrossum\Documents\Automation\S7-1200 1020 with Profinet\S7-1200 1020 with Profinet												
P	Project Edit View Insert Online Options Tools Window Help												
E	📑 📴 🛃 Save project 🚇 🐰 🏥 👔 🗙 为 🛨 (주 🖢 🖥 🛄 🌇 🖉 🕼 🖉 🖓 Go online 🖉 Go offline 🛔 🕼 🥵 🛃 🛄 (Search in project) 🙀												
Project tree 🔲 🖣 S			S7-1200 1020 with Profinet ▶ PLC_1 [CPU 1212C AC/DC/Rly] ▶ PLC tags ▶ Diacnostics Module [2]										
	Devices												
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<b>#</b> :	*	🖻 🛃 😤 🛍									
2		D	iacn	acnostics Module									
Ē	▼ 📋 \$7-1200 1020 with Profinet			Name	Data type	Address	Retain	Acces	Writa	Visibl			
Lan I	📑 Add new device	1	-	1020_Slave_Sequence_Counter	DWord	%ID105							
6	Devices & networks	2	-00	1020_Master_Sequence_Counter	DWord	%ID109							
l ā	PLC_1 [CPU 1212C AC/DC/Rly]			<add new=""></add>	1			<b>V</b>	<b>V</b>	<b>V</b>			
Ĭ	T Device configuration												
	🖳 Online & diagnostics												
	Program blocks												
	Technology objects												
	External source files												
	PLC tags												
	a Show all tags												
	Add new tag table												
	🎬 Default tag table [27]												
	Diacnostics Module [2]												
	Inputs Outputs Markers Module [4]												
	🍇 Remote Command Module [6]												
	🍇 Weigher Input Module [14]												
	Ele PLC data types												

This is all the data that can be read and write to the 1020, use the Penko Manual Profinet slave module that can be downloaded from the site: <u>https://penko.com/Support/Software/</u> to see what you can do with the data.





#### About PENKO

Our design expertise include systems for manufacturing plants, bulk weighing, check weighing, force measuring and process control. For over 35 years, PENKO Engineering B.V. has been at the forefront of development and production of high-accuracy, high-speed weighing systems and our solutions continue to help cut costs, increase ROI and drive profits for some of the largest global brands, such as Cargill, Sara Lee, Heinz, Kraft Foods and Unilever to name but a few.

Whether you are looking for a simple stand-alone weighing system or a high-speed weighing and dosing controller for a complex automated production line, PENKO has a comprehensive range of standard solutions you can rely on.

#### Certifications

PENKO sets high standards for its products and product performance which are tested, certified and approved by independent expert and government organizations to ensure they meet – and even – exceed metrology industry guidelines. A library of testing certificates is available for reference on:

http://penko.com/nl/publications\_certificates.html

# USTED OF CE

#### **PENKO Professional Services**

PENKO is committed to ensuring every system is installed, tested, programmed, commissioned and operational to client specifications. Our engineers, at our weighing center in Ede, Netherlands, as well as our distributors around the world, strive to solve most weighing-system issues within the same day. On a monthly basis PENKO offers free training classes to anyone interested in exploring modern, high-speed weighing instruments and solutions. A schedule of training sessions is found on: www.penko.com/training

#### **PENKO Alliances**

PENKO's worldwide network: Australia, Belgium, Brazil, China, Denmark, Germany, Egypt, Finland, France, India, Italy, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Syria, Turkey, United Kingdom, South Africa, Slovakia Sweden, Switzerland and Singapore. A complete overview you will find on: www.penko.com/dealers

