







3

3

3

3

3

3

4-5

6

7-11

12-19

proNet - PROFINET / PROFIsafe communication module Configuration Instructions

Important:

This document of example is for the purpose of demonstration only. It represents only part of a complete safety system and does not fulfil any safety function on its own. It is the customer's responsibility to ensure that the setting of the *pro*Net units is correct and complies with the relevant risk assessment of the applications, safety standards and regulations. No responsibility is accepted if the document is misused. The information in this document is subject to change without notice and should not be construed as a commitment by Fortress Interlocks. Fortress Interlocks assumes no responsibility for any errors that may appear in this document.

Contents General information List of components and software proNet communication module Siemens PLC Software used for this document General information about proNet Assigning an IP address and device name using Proneta Set up F-Address in the proNet unit Adding a proNet unit to a TIA Portal V14 Project

Adding a proNet unit to Network and setup parameters

General Information

This document demonstrates how to connect a Fortress proNet unit to Siemens S7-1200 Failsafe PLC. The information provided in this document accompanies the installation instructions for proNet.

List of components and software

proNet communication module

This document uses a Fortress Interlocks amGard*pro pro*Net PF10 unit. The PF10 is composed of 2 data ports and 2 power ports. Please refer to *pro*Net datasheet for further details.



Siemens PLC

he PLC used for this demonstration is Siemens SIMATIC S7-1214FC Failsafe PLC.

Software used for this document

The programing and commissioning software used were as follows:

- 1. Siemens Proneta 2.3 Commissioning and diagnostics tool for PROFINET networks
- 2. SIMATIC Step 7 Safety Basic version 14.0

3. SIMATIC Step 7 Basic version 14.0

General information about proNet

The *pro*Net module allows the features of amGard*pro* to become distributed IO on a PROFINET network. Safety data is exchanged using PROFIsafe protocol.

See individual datasheets for further details about the modules. Also see the installation instruction for the information of mounting and product dimensions. These documents are both available from Fortress Interlocks website.

The GSDML file for proNet units can also be downloaded from Fortress website link below: http://www.fortressinterlocks.com/Product/169/pronet-profinet-profisafe-communication-module

Two GSDML files are provided on the website:

- For units with part numbers containing N0xxxxN or N2xxxxN please download: "GSDML Zip File". This is for units that **do not** support MRP.
- For units with part numbers containing N6xxxxN or N8xxxxN please download: "GSDML Zip File for

Assigning an IP address and device name using Proneta
Assign the IP address and device name of the unit by using PRONETA 2.3 Commissioning and
Diagnostics Tool for PROFINET (Available from: https://www.siemens.com/global/en/home.html)
Siemens - PRONETA
A Home ► Help?
General Settings Network Adapter Selection GSDML Manager
Scanner Scanner
List of loaded GSDML files
▶ General
♦ Sensors
▶ Gateway
▶ I/O
Ident Systems
Switching Devices
Figure 1: Open PRONETA, go to GSDML Manager Page and click on load button to add GSDML file for
the first time
Siemens - PRONETA
♠ Home
General Settings Network Adapter Selection GSDML Manager
List of loaded GSDML files
▼ General
SCALANCE X-200 Switches
▼ amGardPro
GSDML file C:\proneta_2_3_0_26\GSDML-V2.3-Fortress-ProLok-20151216.xml
Vendor Fortress Interlocks (0x02D9) Device ID 0x000F
Info T_ID_DEV_DESCRIPTION
Order Numbers
> Sensors
> Gateway
► 1/O
 Ident Systems
Switching Devices
·
Figure 2: The proNet GSDML is now added to the product library

Ron Siemens - PRONETA	A 10 800-	Denset is Survey, Sont' Married Work and Balling and	
SIEMENS			PRONETA
A Home			► Help ?
	Network analysis	 Online: show online topology and configure devices Offline: show offline topologies Comparison: compare online and offline topologies Configuration: adopt device names from an offline topology or a STEP7 project 	
	IO test	Force and monitor values of SIMATIC ET 200 devices	
	Y Settings	Change Proneta settings	
Figure 3: Click	on network analysis to scan	the devices on PROFINET network	
Siemens - PRONETA Home			Help?
Online Offline Comparise	on Configuration	Search for	r devices D Scanner
Topology View - online		Accessible Devices - online	
	⊕ r ⊑	1 pronet pronet amGardPro 3	IP Address 192.168.0.10
switt switt 1		2 plc_1 plcxb1d0ed \$7-1200	192.168.0.5
Figure 4: Devic	e names and IP addresses	of units can be changed on the above page	

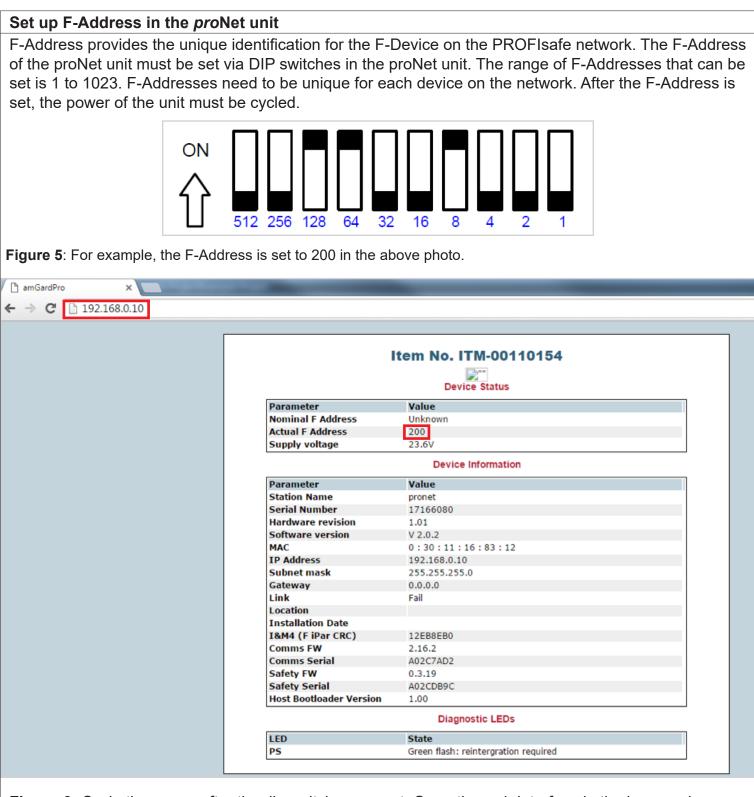
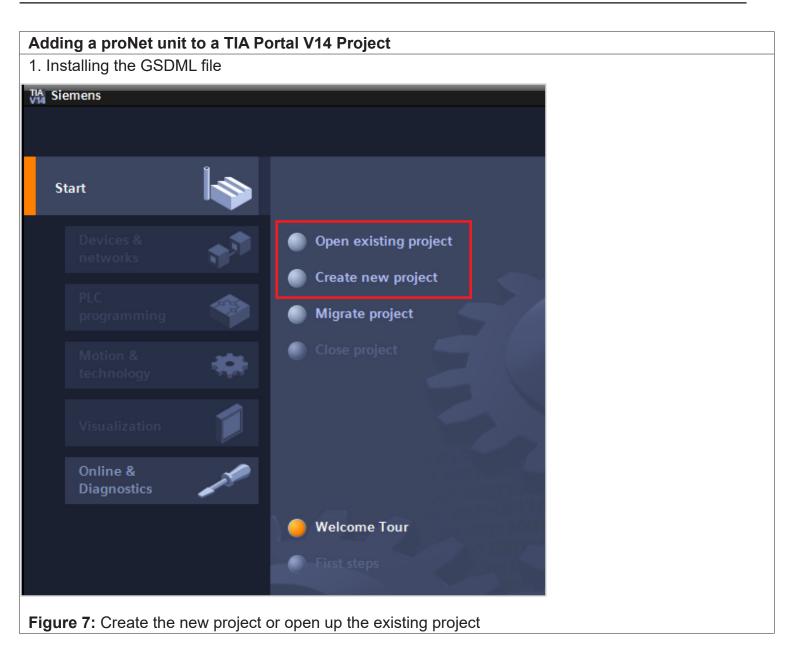


Figure 6: Cycle the power after the dip switches are set. Open the web interface in the browser by using the IP address of the unit. The current F-Address is shown on the page. *Note: The number shown in the photo is for illustration purposes only.*



Integrating
Project twe Device Cptions V Find and replace V Gomma data
Options Image: Comparison statings Image: Comparison statings <
Add rev device Add rev device Add rev device Common data
Lample_Project Add rew device Devices a freedowise Devices a freedowise Common data Devices a freedowise Device a freedowise Devices a freedowise Devices a freedowise Devices a freedowise Devices a freedowise Device a freedowise Devices a freedowise
Lample_Project Add rew device Devices a freedowise Devices a freedowise Common data Devices a freedowise Device a freedowise Devices a freedowise Devices a freedowise Devices a freedowise Devices a freedowise Device a freedowise Devices a freedowise
Image: Add new device Find: Image: Benefords Image: Benefords </th
Contractions Contrel Contracting Contracting Contracting Contracti
Mole words only Mole words only Mol
Common data Common da
Contractes C
Gonde access Gonde acces Gonde access Gonde access Gonde ac
Grad ReaderitUSB memory Grad Reader
Constant and a second and
Operation
Up Find Replace with: • Mole document • From current position • Selection Replace all • Languages & resources • Languages & resources
Up Find Replace with: • Mole document • From current position • Selection Replace all • Languages & resources • Languages & resources
Image: Second
Replace with:
O Properties Tuto, pp (2) Diagonatics Tuto, pp (2) Diagonatics Tuto, pp (2) Diagonatics
O While document Prom current position Selection Replace all Lingto (P (2) Diagnostics Lingto (P (2)
Prometies Turne (P (2) Diagnostics
Prometies Turne (P (2) Diagnostics
Selection
Properties Tilleto (P 2) Diagnostics V Languages & resources
C Properties Tillefo Q Vilanges K resources
@ Properties 11 Info @ 20 Diagnostics
9 Properties 1 Diagnostics - 1
Editing language:
General (2) Cross-references Compile
S A S show all messages
Reference language:
I Path Description Go to 7 Errors Warnings Time
▼ Details view
Name
Add new device
📥 Devices & networks
Terror Common data
al common os as
anguages & resources
🛉 Portal vlew 🗄 Overview
Total Helt

Figure 8: When project is opened, go to Project View Window

VIA Sieme	ns - C:\Example_Project\Exa	mple_Project
Project	Edit View Insert Online	Options Tools Window Help
📑 🔁 E	🖌 Save project 📑 🐰 🛅	👔 📍 Settings e 💋 Go offline 🛛 👫 🖪 🕼 🛠 🖃 🛄 < Search in projec
Projec	t tree	Support packages
Dev	rices	Manage general station description files (GSD) Start Automation License Manager
		Show reference text
-] E	Example_Project	Global libraries
1 2	Add new device	
Sta	h Devices & networks	
🔰 🕨 🖁	🔜 Ungrouped devices	
🔰 🕨 🕻	🙀 Common data	
) 🔶 🖡	Documentation settings	
► 	🐻 Languages & resources	
📃 🕨 🔚 🤇	Online access	
• 📑 🤇	Card Reader/USB memory	

Figure 9: Install the Fortress GSDML file for the first time by clicking on 'Manage general description files (GSD)'

Manage genera	station description	ı files			×
Source path:	C:\GSD				
Content of imp	ported path				
File		Version	Language	Status	Info
GSDML-V2.3-	Fortress-ProLok-2015	V2.3	English	Not yet installed	amardPro L
<					>
					/
				Delete Install	Cancel
	I the GSDML file, which mation of <i>pro</i> Net	n is available fr	om the Fortre	ess website.	

Canto	and of the sector of models			
Conte	ent of imported path	. ·	 	
Mana	ge general station des	cription files		
Inst	allation result			
	Message			
	Installation was comple	ted successfully.		
_		Install additional files	 	

Project tree	
Devices	
35	🔲 🖬
 Example Project 	
📑 Add new device	
品 Devices & networks	
PLC_1 [CPU 1214FC DC/DC/RLY]	
Ungrouped devices	
Unassigned devices	
🕨 🙀 Common data	
Documentation settings	
🕨 🐻 Languages & resources	
Online access	
Eard Reader/USB memory	

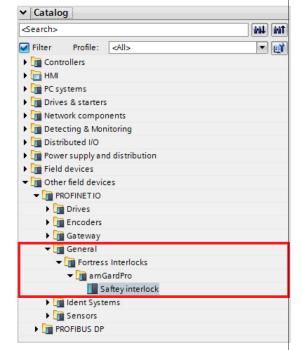


Figure 12: Click on Devices & networks tab under project tree.

Figure 13: The *pro*Net unit will be shown in the device catalog

✓ Information	on
Device:	Saftey interlock
Article no.:	
Version:	(GSDML-V2.3-FORTRESS-PROLOK-20151216.XML)
Description:	
	a modular safety gate interlock for heavy duty applications with addiotnal I/O capability. This Device upports RT communication
Figure 14: Th	ne ProNet unit shown in the information page

Adding a <i>pro</i> Net unit to Network	and setup parameters			
Example Project > Devices & networks				_ # # ×
Network Connections HMI connection	🛃 Topol 🛃 📰 🔍	ogy view ±	Network view	w Device view
PLC_1 CPU 1214FC		net ey interlock assigned		
Figure 15: Drag <i>pro</i> Net unit into net view of the new unit		the new		
example project > Ungrouped devices > pronet [Saftey inter			× = 1	Hardware catalog
🔐 pronet [Saftey interlock] 🔽 🕎 🕎 🖉 🚛 🛄 🔍 生	Topology view	hetwork vie	w Device view	Options
	Device overview	Rack Slot	I address Q address Type	✓ Catalog
	pronet	0 0	Saf	<search></search>
Poret	► Interface	0 0 X1 0 1	pro	Filter Profile: <all></all>
\$ ⁴⁰ .		0 2		Head module Module
				✓ L Module ✓ L Functional Safety
_				Safety module
				Input/Output Input/Output Input/Output

Figure 16: Drag the safety module and Unsafe IO module from catalog into the device interface

/ic	e overview					
	. Module	Rack	Slot	I address	Q address	Туре
	▼ pronet	0	0			Saftey interlock
	Interface	0	0 X1			pronet
	Safety module_1	0	1			Safety module
	 Unsafe IO data_1 	0	2			Unsafe IO data
	IO lamps	0	2 1			IO lamps
	IO switches	0	2 2			IO switches
	Solenoid drive	0	23			Solenoid drive
		0	24			Gate monitor
	Gate monitor	0	24			Gate monitor
	Solenoid monitor 7: The safety module and unsaf	0	2 5	d to the unit		Solenoid moni
le P	Solenoid monitor	0	2 5 e is addeo	logy view	Network vie	Solenoid monit
le P	Solenoid monitor 7: The safety module and unsaf roject > Devices & networks	0 fe IO module	2 5 e is addeo	logy view	Network vie	Solenoid monit
le P	Solenoid monitor 7: The safety module and unsaf roject > Devices & networks	fe IO module	2 5 e is addeo Topol	logy view ≰ ystem onew 10 controll		Solenoid monit

Network Connections HMI connection		Topology vie			ork viev PROFIN			₩ ▲
PLC_1 CPU 1214FC		pronet Saftey inte PLC_1	rlock					
gure 19: PROFINET link is shown between the nple project > Ungrouped devices > pronet [Saftey interlock]		T IO-Syste ⊨ d <i>pro</i> Net unit.						
gure 19: PROFINET link is shown between the	PLC and	d <i>pro</i> Net unit.	E Topolo	gy view	h Net	work view	V	
gure 19: PROFINET link is shown between the	PLC and	d <i>pro</i> Net unit.				,	/ Device v	/iev
gure 19: PROFINET link is shown between the project > Ungrouped devices > pronet [Saftey interlock]	PLC and	d <i>pro</i> Net unit.	Rack 0	Slot		Q address	Device v	
Jure 19: PROFINET link is shown between the ple project > Ungrouped devices > pronet [Saftey interlock] pronet [Saftey interlock] Pronet [Saftey interloc	PLC and	d <i>pro</i> Net unit.	Rack			,	Type Saftey interlock	
pronet [Saftey interlock]	PLC and	d <i>pro</i> Net unit.	Rack	Slot 0		,	Device v	
pronet [Saftey interlock]	PLC and	d <i>pro</i> Net unit. overview Module	Rack O O	Slot 0 0 X1	I address	Q address	Type Saftey interlock pronet	
Jure 19: PROFINET link is shown between the ple project > Ungrouped devices > pronet [Saftey interlock] pronet [Saftey interlock] Pronet [Saftey interloc	PLC and	d <i>pro</i> Net unit. overview Module ✓ pronet > Interface Safety module_1	Rack O O O	Slot 0 0 X1 1	I address	Q address	Type Saftey interlock pronet Safety module	
Jure 19: PROFINET link is shown between the ple project > Ungrouped devices > pronet [Saftey interlock] pronet [Saftey interlock] Pronet [Saftey interloc	PLC and	d proNet unit. overview Module Verview Module Safety module_1 Verview Module_1 Verview Module_1	Rack O O O O	Slot 0 0 X1 1 2	I address	Q address	Type Saftey interlock pronet Saftey module Unsafe IO data	
gure 19: PROFINET link is shown between the ple project > Ungrouped devices > pronet [Saftey interlock] pronet [Saftey interlock] Pronet [Saftey interloc	PLC and	d proNet unit. overview Module Verview Module Safety module_1 Unsafe IO data_1 IO lamps	Rack 0 0 0 0 0 0 0 0	Slot 0 0 X1 1 2 2 1	I address	Q address	Type Saftey interlock pronet Safety module Unsafe 10 data 10 lamps	
gure 19: PROFINET link is shown between the nple project > Ungrouped devices > pronet [Saftey interlock]	PLC and	d proNet unit. overview Module • pronet • Interface Safety module_1 • Unsafe IO data_1 IO lamps IO switches	Rack 0 0 0 0 0 0 0 0 0 0 0 0 0	Slot 0 0 X1 1 2 2 1 2 2	I address	Q address	Type Saftey interlock pronet Safety module Unsafe IO data IO lamps IO switches	
Jure 19: PROFINET link is shown between the ple project > Ungrouped devices > pronet [Saftey interlock] pronet [Saftey interlock] Pronet [Saftey interloc	PLC and	d proNet unit. overview Module • pronet • Interface Safety module_1 • Unsafe IO data_1 IO lamps IO switches Solenoid drive	Rack 0 0 0 0 0 0 0 0 0 0 0 0	Slot 0 0 X1 1 2 2 1 2 2 2 3	I address	Q address	Type Saftey interlock pronet Safety module Unsafe IO data IO lamps IO switches Solenoid drive	

Jevice	overview							
**	Module		Rack	Slot	I address	Q address	Туре	A
	 pronet 		0	0			Saftey interlock	
	► Inte		0	0 X1			pronet	
					1 7	1 7		
	-	module_1	0	1	17	17	Safety module	
	 Unsafe 	IO data_1	0	2			Unsafe IO data	
	IO I	amps	0	21		8	IO lamps	
	IO s	witches	0	22	8		IO switches	
	Sole	enoid drive	0	23		9	Solenoid drive	
			-			-		
		te monitor	0	24	9		Gate monitor	
	Sole	enoid monitor	0	2 5	10		Solenoid monitor	
eneral Catalog inf ROFINET inte General	formation erface [X1]	tem constants Texts General Name:	pronet			Roperties	Linfo 🚺 🛛 Diagnostics	
eneral Catalog inf ROFINET inte General Ethernet au Advanced Interface	IO tags Sys formation erface [X1] iddresses	General				Properties	Linfo	
ieneral Catalog inf ROFINET inte General Ethernet au Advanced Interfact Real tim Tort 1 [2	IO tags Sys formation erface [X1] iddresses options ee options ne settings X1 P1]	General				Properties	Linfo	
eneral catalog inf Cotalog inf ROFINET inte General Ethernet ac Advanced Interface Real tim Port 1 [> Gene	IO tags Sys formation erface [X1] iddresses options ee options ne settings X1 P1]	General	ChenY			Properties	Linto	
eneral catalog inf Cotalog inf ROFINET inte General Ethernet ac Advanced Interface Real tim Port 1 [2 Gene Port i Port of	IO tags Sys formation erface [X1] iddresses options ee options ne settings X1 P1] eral interconnection options	General	ChenY 0			Properties	Linto	
eneral catalog inf ROFINET inte General Ethernet au Advanced Interface Real tim Port 1 [2 Gene Port 1 Port 1 Advanced Hard	IO tags Sys formation erface [X1] iddresses options ee options ne settings X1 P1] eral interconnection options Iware identifier	General	ChenY 0			Properties	Linfo	
eneral catalog inf ROFINET inte General Ethernet au Advanced Interface Real tim Port 1 [2 Gene Port i Port of	IO tags Sys formation erface [X1] iddresses options ee options ne settings X1 P1] eral interconnection options Iware identifier X1 P2]	General	ChenY 0			Properties	Linfo	
eneral catalog inf ROFINET inte General Ethernet au Advanced Interface Real tim Port 1 [2 Gene Port 1 Port 2 [2 Hardware i lentification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General Author: Comment: Rack: Slot: Catalog information	ChenY 0 0				Linfo	
eneral Catalog inf CoFINET inte General Ethernet ac Advanced Interface Real tim Port 1 [2 Gene Port 1 [2 Gene Port 1 [2 Hardware i entification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY 0 0 Saftey interfe					
eneral eneral Catalog inf ROFINET inte General Ethernet ad Advanced Interface Real tim Port 1 [2 Gene Port 1 [2 Gene Port 1 Port 2 [2 Hardware i lentification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY 0 0 Saftey interfe This device i	s a modular safe	ety gate interlock for h		The Diagnostics	
eneral Catalog inf CoFINET inte General Ethernet ac Advanced Interface Real tim Port 1 [2 Gene Port 1 [2 Gene Port 1 [2 Hardware i entification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY 0 0 Saftey interfe This device i	s a modular safe				
eneral eneral Catalog inf CoFINET inter General Ethernet act Advanced Interface Real tim Port 1 [2 General Port 1 [2 General Port 2 [2 Hardware i entification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY 0 0 Saftey interfe This device i	s a modular safe				
eneral catalog inf ROFINET inte General Ethernet au Advanced Interface Real tim Port 1 [2 Gene Port 1 Port 2 [2 Hardware i	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY 0 0 Saftey interfe This device i	s a modular safe				
eneral catalog inf ROFINET inte General Ethernet au Advanced Interface Real tim Port 1 [2 Gene Port 1 Port 2 [2 Hardware i lentification	IO tags Sys formation erface [X1] iddresses options te options te options the settings X1 P1] eral interconnection options Iware identifier X1 P2] identifier & Maintenance	General	ChenY O O Saftey interla This device i Device Acce	s a modular safe	s RT communication			

pronet [Saftey interlock]			🔍 Properties	🗓 Info 📋 🗓 Diagnostics	
General IO tags Sys	tem constants Texts				
General Catalog information PROFINET interface [X1] General Ethernet addresses	Ethernet addresses	PN/IE 1			
Advanced options Interface options		Add new subnet			
Real time settings Port 1 [X1 P1] General Port interconnection Port options Hardware identifier Port 2 [X1 P2] Hardware identifier Identification & Maintenance Hardware identifier	IP protocol	Set IP address in the project IP address: 192.168.1 .1 Subnet mask: 255.255.255.0 Use router Router address: 0 .0 .0 .0 IP address is set directly at the device			
	PROFINET PROFINET device name Converted name: Device number:	pronet			

Figure 23: Set the IP address of the *pro*Net unit in the program, the device name can also be set up under the page

2	Module	Rack	Slot	I address	Q address	Туре	Art.
	▼ pronet	0	0			Saftey interlock	
	Interface	0	0 X1			pronet	
	Safety module_1	0	1	17	17	Safety module	
	 Unsafe IO data_1 	0	2			Unsafe IO data	
	IO lamps	0	2 1		8	IO lamps	
	IO switches	0	22	8		IO switches	
	Solenoid drive	0	23		9	Solenoid drive	
	Gate monitor	0	24	9		Gate monitor	
	Solenoid monitor	0	2 5	10		Solenoid monitor	

Figure 24: Right-click on the safety module and select properties to access to the properties page of safety module

Safety modul	le_1 [Safety	modu	ule]			🔍 Properties	🗓 Info 🔒 🎚 Diagnostics	
General	IO tags	Sys	tem constants	Texts				
General PROFIsafe			PROFIsafe					
Inputs								
I/O addresses				F	_SIL: SI	L3	▼	
Hardware ide	ntifier	-		F_CRC_Ler	ngth: 3-B	Byte-CRC	v	
				F_Bloc	k_ID: 1			
				F_Par_Ver	sion: 1			
				F_Source_	Add: 1			
				F_Dest_	Add: 1			
			F_Par_CRC_W	/ithoutAddres	ses: 0			
		1				Manual assignment of F-monitoring time		
				FWDT	íme: 15	0 ms		
					CRC: 19			
					CRC: 41			
						F-I/O DB manual number assignment		
				F-I/O DB-num	nber: 30	009		
				F-I/O DB-na	ame: FO	10001_Safetymodule_1		

Figure 25: The PROFIsafe setting including F-Address can be changed under this page. The values and settings shown in this example are for the purpose of demonstration only. It is customer's responsibility to make sure the setting of PROFIsafe unit is correct based on customer's risk assessment and applications. No responsibility is accepted if the information in this document is misused.

Gen	eral	IO tags	System	m constant	s Texts	
	Name		Туре	Address	Tag table	Comment
-	Head / S	olenoid 1	Bool	%I1.0	Default tag table	
-	Head / S	olenoid 2	Bool	%11.1	Default tag table	
-	Aux 1		Bool	%11.2	Default tag table	
-	Aux 2		Bool	%11.3	Default tag table	
-	Estop 1		Bool	%11.4	Default tag table	
-	Estop 2		Bool	%11.5	Default tag table	
			Bool	%11.6		
			Bool	%11.7		
			Bool	%12.0		•
			Bool	%I2.1		
			Bool	%12.2		
			Bool	%12.3		
			Bool	%12.4		
			Bool	%12.5		
			Bool	%12.6		
			Bool	%12.7		

Figure 26: Click on "IO tags" to create the tags for the safety IO

Device	overview						
**	Module	Rack	Slot	I address	Q address	Туре	Art.
	▼ pronet	0	0			Saftey interlock	
	Interface	0	0 X1			pronet	
	Safety module_1	0	1	17	17	Safety module	
	 Unsafe IO data_1 	0	2			Unsafe IO data	
	IO lamps	0	2 1		8	IO lamps	
	IO switches	0	2 2	8		IO switches	
	Solenoid drive	0	23		9	Solenoid drive	
	Gate monitor	0	24	9		Gate monitor	
	Solenoid monitor	0	25	10		Solenoid monitor	

Figure 27: Click on Unsafe IO data to view the properties page of Unsafe IO

eneral IO tags	System	constants	Texts				
Name	Туре	Address	Tag table	Cor	nment		
Gate Monitor	Bool	%19.0	Default tag table				
Red Lamp	Bool	%Q8.0	Default tag table				
Green Lamp	Bool	%Q8.1	Default tag table				
Yellow Lamp	Bool	%Q8.2	Default tag table				
	Bool	%Q8.3					
	Bool	%Q8.4					
	Bool	%Q8.5					
	Bool	%Q8.6					
	Bool	%Q8.7					
Solenoid Drive	Bool	%Q9.0	Default tag table				
Solenoid Monitor	Bool	%110.0	Default tag table				
Red push button	Bool	%18.0	Default tag table	-			
Green push button	Bool	%18.1	Default tag table				
Yellow push button	Bool	%18.2	Default tag table				
	Bool	%18.3					
	Bool	%18.4					
	Bool	%18.5					
	Bool	%18.6					

PLC1 [CPU 1212FC DC/DC	(RLY]				Properties	🗓 Info 追 🗓 Diagnostics	
General IO tags	Syst	em constants	Texts		-		
General		E 11 11		·			
▼ Fail-safe		F-activation					
F-activation							
F-parameters				F-capability activated			
PROFINET interface [X1]							
DI 8/DQ 6				Disable F-activation			
► AI 2							
 High speed counters (HSC) 							
 Pulse generators (PTO/PWM) 							
Startup							
Cycle							
Communication load	•						
System and clock memory	-						
Webserver							
Multilingual support	- 1						
Time of day							
 Protection 	_						
Connection mechanisms	- 1						
Security event External load memory	- 1						
externational memory							
Figure 29: Make	sur	e F-Capabi	lity ena	bled on the PLC. The safety paramet	ters should	be configured based	on
the customer's a	oplic	ation and a	accordii	ng to their individual risk assessment	. The value	s and settings shown	in this
				stration only. No responsibility is take		•	
		•	uomona	station only. No responsibility is take			
document is misu	lsec	l.					