GW-7553 and SIMATIC STEP 7(TIA Portal) Configurations

1. Double click "TIA Portal" icon.



- 2. (A) Select "Create new project"
- (B) Set project name and click "Create"

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	Project view				

3. Select "Configure a device"



- 4. (A) Select "Add new device"
- (B) Select your PLC type and click "Add"



5. Click "Options" and then click "Install general station description file(GSD)"



- 6. (A) Click "..."
- (B) Select the directory of GW-7553's GSD file(ipds0c0d.gsd) and click"OK"



- 7. (A) Tick the item of GW-7553 GSD file
- (B) Click "Install" and then click "Yes"

	Install general statio Source path: C:\C	on descriptio GW-7553	n file			×
	Content of importe	d path				
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8. Click "close"

Inst	all general station description file	×
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0	Installation was completed successfully.	
	Save log Install additional files Close	

9. Click "Overview" and then click "Device Configuration"

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10. (A) Click "Network view" and confirm GW-7553 is available in "Catalog"

(B) The path of GW-7553 in "Catalog" :

"Other field devices" \rightarrow "PROFIBUS DP" \rightarrow "Gateways" \rightarrow "ICP DAS Co. Ltd" \rightarrow "GW-7553"

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11. (A) Double click "GW-7553"

(B) hold down the block which is PROFIBUS DP interface in PLC and move the mouse cursor to the block of GW-7553.

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- 12. (A) Click "PLC_1 DP-Mastersystem(1)"
- (B) click "Properties"
- (C) click "PROFIBUS"
- (D) In "Network settings"
 - (1) set "Highest PROFIBUS address"=126, "Profile"=DP.
 - (2) "Transmission speed" : set the value which you need.

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	Name: PROFIBUS_1							
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	Network settings							
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	Transmission speed: 1.5 Mbps 💌							
	Profile: DP							
	Cable configuration							
<	Take into account the following cable configuration							

13. (A) If "Not assigned" is shown in GW-7553, click "Not assigned" and select your PLC. (C)Double Click your PLC

Project2 → Devices & networks			_ 7	iх
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	₽	Master system: PLC_1.D	-Mastersystem (1)	^
PLC_1 CPU 315-2 PN/DP	Slave_1 GW-7553(DP A. Not assigned	/1) DP-NORM Delect master: PLC_1.MPI/DP interface_1) B.	

- 14. (A) Click the PROFIBUS DP interface.
- (B) Click "Properties" and "PROFIBUS address"
- (C) In "Parameters":
 - (1) set "Interface type"=PROFIBUS.
 - (2) "Address": set PROFIBUS address for your PLC.

Project2 > PLC_1 [CPU 315-	2 PN/DP]					_ # # X
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SYNC/FREEZE Diagnostics a		Subnet: PROFIBU	3_1 d new subnet		•	
	Parameters D.					
•	Int	erface type: PROFIBU: Address: 2				
	High Transmis	st address: 126 sion speed: 1.5 Mbps	×			
< III >						

15. (A) Select "Slave_1" (If GW-7553 is "Slave_2", select "Slave_2", etc.)

(B) Click "Properties" and "Device-specific"

(C) You can set device parameters of GW-7553 in "Device-specific parameters" (e.g. baud rate, parity, data bit)

Project2 → PLC_1 [CPU 315-2 PN/DP]	▶ Dist	ributed	VO DP	-Masters	ystem (1): PRC	FIBUS_1 → Slave_1	_ 🖬 🖬 🗙
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	0	1					
	0	2				D	
	0	3	a) <mark>l</mark>	111		D.	
Slave 1 [Module]				ſ	Properties	til Info 😗 🗓 Dia	mostics
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General TO tags Texts		anagaal	La amaga a t				
General	bau	d rate:	115200 ba	ud		· · · · · · · · · · · · · · · · · · ·	^
General D		parity:	none			•	
Device-sp	8 data bit			-			
	st	op bit:	1 stop bit			•	-
		-					1



Properties	Select 200milactor	E
Slave_1 [Module]	S. Propertie	s 🚺 Info 🚺 🔽 Diagnostics
General 10 tags Texts		
General PROFIBUS ad. General DP n		C .
Device-specific baud rate:	115200 baud	-
Hex parameter parity:	none	
SYNC/FREEZE data:	8 data bit	-
Diagnostics a stop bit	1 stop bit	-
• Nodbus Type:	Master	-
Modbus Format	Modbus RTU	-
- I/O Safe Mode:	Retain Last Value	-
Byte Order.	Big Endian(Motorola format)	
Output Data Mode:	Auto	-
Modbus Device ID (S):	1	
Modbus Polling Interval(ms) (M):	500	
Cuery timeout Value(ms)(M):	500	

16. (A) Click "PROFIBUS address"

(B) You can set PROFIBUS address of GW-7553 in "PROFIBUS address"

Project2 Project2 Project2 PN/DI	P] → Dis	tributed	IVO ► DP	-Masters	ystem (1):	PROFIBUS	<u>_</u> 1 →	Slave_1		_ 🖬 🖬 >	×
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Device overview											
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Slave_1 [Module]						🔍 Propert	ties	i Info 🚺	🕹 Diagnostic	s i = i	1
General IO tags Texts											
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Properties		
Slave_1 [Module]		🔍 Properties 🚺 Info 追 🗓 Diagnostics
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General PROFIBUS ad	PROFIBUS address	
General DP p Device-specific Hex parameter Watchdog	Interface networked with Subnet PROFIBUS_1	
SYNC/FREEZE	Add new st	Innet
Diagnostics a	Parameters Address: 3 V Highest address: 126 Transmission speed: 15 Mbps V	B.

- 17. (A) Double click "System module" and any IO module which you need.
- (B) Click the IO module and "Properties" and "Device-specific"

(C) You can set the module parameters in "Device-specific parameters"

Project2 > PL	C_1 [CPU 315-2 PN/DP]	Distri	ibuted VO	DP-Masters	ystem (1): PROFI	BUS_1 → Slave_1	_ # #×	Hardware catalog 👘 🗊 🕨 🕨
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		DB	HORM					Filter A.
								GW-7553(DPV1)
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<							> 🗉	Output Relay/Coil–1 byte
Device over	riew							🚺 Output Relay/Coil–2 byte
- Modu		Back	Slot Lad	dress O addr	Type	Order no	Firmware	Output Relay/Coil=3 byte
Sy	stem setting_2_1	0	1	02	System setting	oraci no.	×	Output Relay/Coil–5 byte
Sv	stem setting_2_2	0	2 05		System setting			📗 Output Relay/Coil–6 byte
B . o	utput Relay/Coil=2 byte_1	0	3	34	Output Relay/Coil-	·		Output Relay/Coil-7 byte
<			4	III			>	Output Relay/Coil-9 byte
Output Relay/O	coil-2 byte_1 [Module]			ſ	🔍 Properties	🗓 Info 🔒 🗓 Dia	gnostics 🛛 🗖 🗕 🤜	🚺 Output Relay/Coil–10 byte
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I/O addresses	NO.	of Relay/Coi	il (M): 16 Bl	TS		•		Output Relay/Coil-15 by
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18	(A) Click "Tor	որեն	v view"	,				
10. (D)			y view					
(B)	CIICK YOUR PLC							
(C)	Click "Save pr	oject"	,					
(ח)	Click "compile	anc "e	d "Dow	nload to	Device"			
	ener compil		2000					

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Story PLC_1 [CPU 315-2 PN Device configuration Online & diagnostics Program blocks Fig. Technology objects Fig. External source files		PLC_1 CPU 315-2 PN/DP		E

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19. (A) Select your PG/PC interface

(B) If PC connects PLC successful, the background will be orange

(C) Click "Load"

	Device	Device type	Slot	Type	Address	Subnet
	PLC 1	CPU 315-2 PN/DP	2 X2	PN/IE	192.168.6.21	2
		CPU 315-2 PN/DP	2 ×1	PROFIBUS	2	PROFIBUS_1
	<			III		
			Type of t	the PG/PC interfa		
				PG/PC interfa	ce: 🔝 Intel(R) PRO/1000 T Serve 🔻
			Cor	nnection to subn	et Direct at	slot '2 X2'
				1st gatew	ay;	-
3.	Compatible dev	ices in target subnet:			🔲 si	how all compatible device
3.	Compatible dev	ices in target subnet: Device type	Туре	Ad	☐ SI	how all compatible device
3.	Compatible dev nevice F_C_1	ices in target subnet: Device type CPU 315-2 PN/DP	Type PN/IE	Ad	Si dress 2 168 6 212	how all compatible device Target device FLC_1
3.	Compatible dev nevice F_C_1 	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 19 Ad	dress 2.168.6.212 cess address	how all compatible device Target device PLC_1 —
3. I.	Compatible dev Device F_C_1 	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 15 Ac	dress 2.168.6.212 cess address	how all compatible device Target device PLC_1 —
3.	Compatible dev Revice F_C_1 	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 15 Ac	dress 2.168.6.212 cess address	how all compatible device Target device PLC_1 —
B.	Compatible dev Device FLC_1	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 19 Ac	Si dress 2 168 6 212 cess address	how all compatible device Target device PLC_1 —
3.	Compatible dev Pevice F_C_1 	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 19 Ac	Si dress 12.168.6.212 cess address	how all compatible device Target device FLC_1 —
3.	Compatible dev evice F_C_1	ices in target subnet Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 19 Ac	SI dress 2 168.6.212 cess address	how all compatible device Target device PLC_1 -
3.	Compatible dev evice F-C_1	ices in target subnet: Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 15 Ad	Sl dress 2.168.6.212 cess address	how all compatible device Target device PLC_1 — <u>Refresh</u>
3.	Compatible dev revice F_C_1	ices in target subnet Device type CPU 315-2 PN/DP —	Type PN/IE PN/IE	Ad 19 Ac	SI dress 2 168.6.212 cess address	how all compatible device Target device PLC_1 <u>R</u> efresh
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3. Flash LED	Compatible dev evice F_C_1 	ces in target subnet: Device type CPU 315-2 PN/DP ss 192.168.6.212 could be a s of 1 accessible devices fo	Type PN/IE PN/IE establishe und.	Ad TS Ad	SI 2168.6.212 cess address	how all compatible device Target device PLC_1 — <u>Refresh</u>

20. Click "Load"

status	!	Target	Message	Action
+[]	0	▼ PLC_1	Ready for loading.	
	0	 Stop modules 	All modules will be stopped for downloading to device.	Stop all
	0	Device configurat.	Delete and replace system data in target	Download to device
	0	▶ Software	Download software to device	Consistent download
<				

21. Tick "Start all" and click "Finish"

tatus	i	Target	Message	Action
1		▼ PLC_1	Downloading to device completed without error.	
	4	 Start modules 	Start modules after downloading to device.	Start all

22. (A) Click "Go online"(B)Click "Start CPU"

