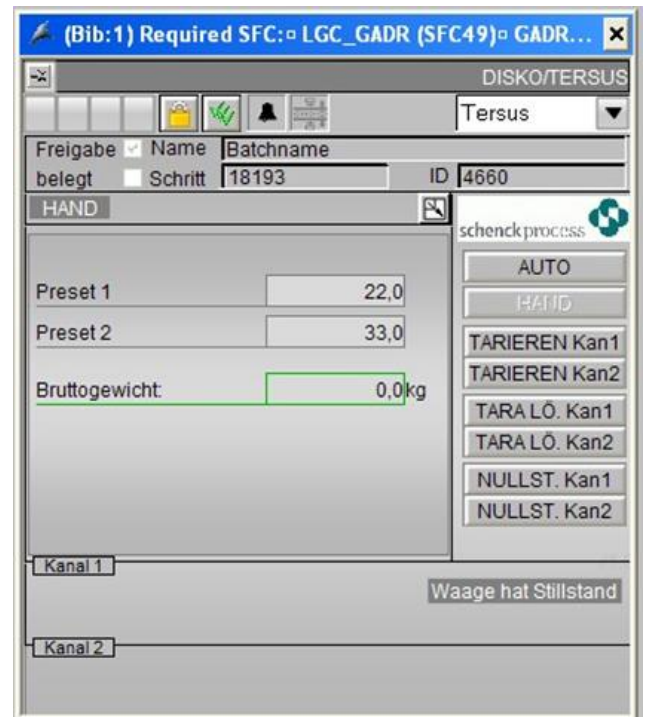


Communication Modules for PCS 7, TIA and STEP 7 to SIEMENS Controllers

- Simple, rapid connection of the scales to SIMATIC controllers
- Complete communication modules for PCS 7, TIA and STEP 7
- The programmer can parameterize the existing modules at any time
- PCS 7 modules have faceplates to visualize the weighing data
- Compatible with PCS 7 release 7, 8 and 9
- The scales is portrayed in the system as a SIEMENS component (in Hardware configuration)
- Easy editing of statuses and commands for setpoints and measured values
- No complicated programming required for fieldbus communication
- All scales values are directly available as binary or numerical values



Faceplate: DISOMAT Tersus

Application

Many of the Schenck Process weighing electronic systems are coupled with SIEMENS controllers from the SIMATIC S7 series. This coupling is often implemented by the customer or on their behalf. PROFIBUS or PROFINET are used as a medium of communication. This often involves significant effort and furthermore the same solution is often re-implemented by different programmers.

With the aid of the communication modules the weighing electronics can be integrated into automation systems with little effort.

Structure

The use of PCS 7 modules, the TIA library or the STEP 7 library means that the customer or the supplier of the control system no longer needs to program the PROFIBUS/PROFINET connection to the weighing electronics themselves.

The communication details remain concealed from the PLC programmer. The programmer needs only to specify the data and parameters desired at the moment of configuration.

Both the PCS 7 modules and the TIA and STEP 7 libraries support all of the fieldbus-capable Schenck Process weighing electronics.

Function

PCS 7 modules

Each of the PCS 7 modules has a 'Faceplate' that shows the most important weighing data in a PCS 7 graphical display.

Furthermore, the module uses the WinCC detection system integrated into the PCS 7.

A module from the TIA or STEP 7 libraries should be used for implementation in a SCADA solution.

TIA library, STEP 7 library

Today, many installations are realized using SIEMENS SIMATIC S7 systems and programmed in TIA or STEP 7.

The STEP 7 library is a collection of routines for the SIMATIC S7-300 and 400 series that implement access from the control program via PROFIBUS/PROFINET to scales data or the transfer of commands and setpoints to the weighing electronics.

There is a corresponding module for the TIA portal for newer series S7-1200/1500 controllers. In this case communication ought to be carried out using PROFINET.

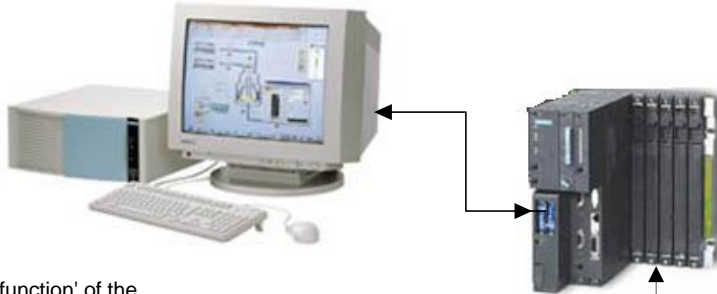
Expansions for editing statuses and commands and for setpoints and measured values can be easily implemented in a familiar programming environment.

Main difference to the PCS 7 modules:
The STEP 7 library routines do not have faceplates or WinCC messages.

The graphical visualization of a module shows inputs (commands, setpoints, etc.) in the left-hand column and status bits and measured values in the right-hand column.

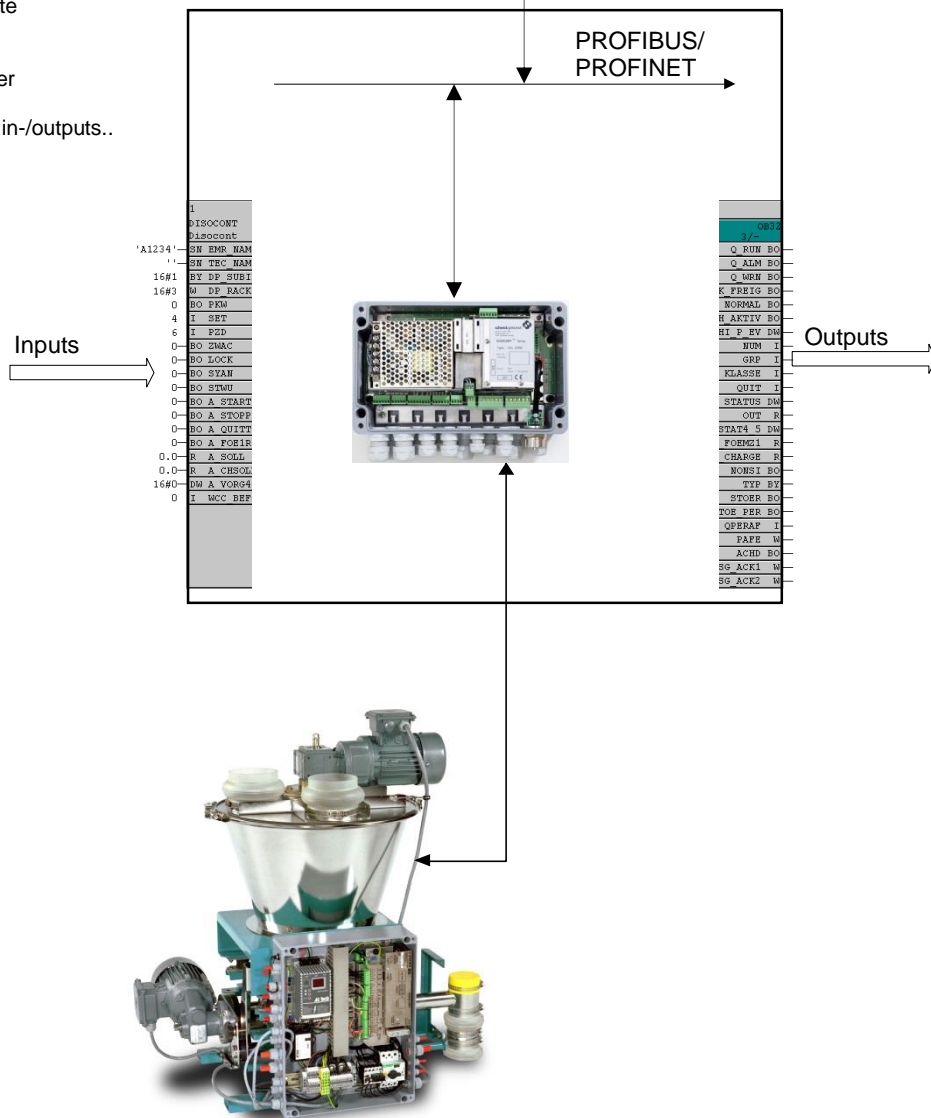
SCALE		0B32
DISCO_P7		6/5
(Bib:4)		
16#200	DEVICE	Q_TXTTKE 16#0
16#200	ADDR_OUT	Q_TXT4 16#0
16#0	DP_SUBID	Q_FKB 16#0
1	CONF_TXT	STATUS 16#080
4	CONF_ID	ST_UFLOW 0
16#0	TXITKE	ST_OFLOW 0
16#0	TXITBK4	ST_TARR4 0
16#0	FKB	ST_NULL 0
16#0	COMMAND	ST_UNGLT 0
16#8000	DP_ID_V1	ST_TARR6 0
16#8004	DP_ID_V2	ST_STILL 1
16#0	A_PRES1	ST_INIT 0
16#0	A_PRES2	SID4 16#3004
16#0	HMI_V1_D	GROSS 63.53467
16#0	HMI_V2_D	GROSS_DI 16#0
0	HMI_COM	VALUE1 16#080
0	HMI_COM0	VALUE2 16#080
0	ZWAC	VALUE3 16#0
0	SYAN	VALUE4 16#427E2380
0	STWU	VALUE5 16#0
0	CSF	VALUE6 16#0
0	A_TARE	VALUE7 16#0
0	A_TARRS	VALUE8 16#0
0	A_SETZ	NUM 0
0	A_QUIT	CLASS 0
	QDP_SUBI	16#1
	QDP_BAKK	16#F
	QDP_BASI	8188
	ACHD	0
	NONSI	0
	FAILURE	0
	FAIL_WEB	0
	FAIL_PER	0
	QPERAF	0
	PAFE	16#0
	MSG_ACK1	16#FFFF

Example: SIEMENS PCS 7 system with DISOCONT Tersus



'Substitute function' of the PCS 7 module:
It conceals the subordinate communication.

The controller programmer can use directly the DISOCONT Tersus CFC in-/outputs..



Manuals for PCS 7 modules:
VPD 28001

DISOCONT BV-H2155AA
 DISOMAT T BV-H2156AA
 DISOMAT T plus BV-H2197AA
 INTECONT PLUS BV-H2245AA
 DISOBOX BV-H2323AA

VPD 28002/VPD 28004

DISCO P7 BV-H2483AA
 CONTI_P7 BV-H2427AA
 DP-V1 BV-H2466AA
VPD 28030 BV-H10008

Manual for STEP 7-library:

VSP 28004 BV-H2473
 VSP 28030 BV-H 10009

PROFIBUS Data can be found in:

DISOCONT BV-H2100 und BV-H2102
 DISOCONT Tersus BV-H2448
 DISOMAT Tersus, Opus, Satus BV-H2359
 DISOBOX, DISOBOX Plus BV-H2359
 INTECONT PLUS BV-H2220
 INTECONT Opus, Satus BV-H2220
 INTECONT Tersus BV-H2474

Equipment Supplied

Program and manual with 1 cd in stock

Type	Description	Material number
VPD 28001	PCS 7 module for coupling to SIEMENS PCS 7 for DISOMAT B plus, DISOMAT T, DISOMAT T plus, DISOBOX, INTECONT PLUS and DISOCONT	D707319.03
VPD 28002	CFC module DISCO_P7 for coupling to SIEMENS PCS 7 version 6.1 for DISOMAT Tersus, DISOMAT Opus, DISOMAT Satus	V079799.B01
VPD 28004	CFC modules for coupling to SIEMENS PCS 7 version 7, 8 and 9: CFC module DISCO_P7 for DISOMAT Tersus, DISOMAT Opus, DISOMAT Satus and DISOBOX Plus CFC module CONTI_P7 for INTECONT Tersus, INTECONT Opus, INTECONT Satus and DISOCONT Tersus add-on module for DP_V1	V594374.B01
VPD 28030	PCS7-module for coupling to CONiQ Control on Siemens PCS7 version 7, 8 and 9	W046353.B01
VSP 28000	STEP 7 library for DISOMAT B plus, DISOMAT T, DISOMAT T plus, DISOBOX, INTECONT PLUS and DISOCONT	V047816.B01
VSP 28004 VTA 28001	TIA and STEP 7 libraries: DISCO_S7 for DISOMAT Tersus, DISOMAT Opus and DISOMAT Satus CONTI_P7 for INTECONT Tersus, INTECONT Opus, INTECONT Satus and DISOCONT Tersus add-on module for DP_V1	V594373.B01
VSP 28030 VTA 28030	VSP 28030 STEP7 library and VTA 28030 TIA library	W046355.B01

Schenck Process Europe GmbH
 Pallaswiesenstr. 100
 64293 Darmstadt, Germany
 T: +49 61 51-15 31 0
 F: +49 61 51-15 31 66
 sales-eu@schenckprocess.com



<https://www.schenckprocess.com/contact>