# 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**
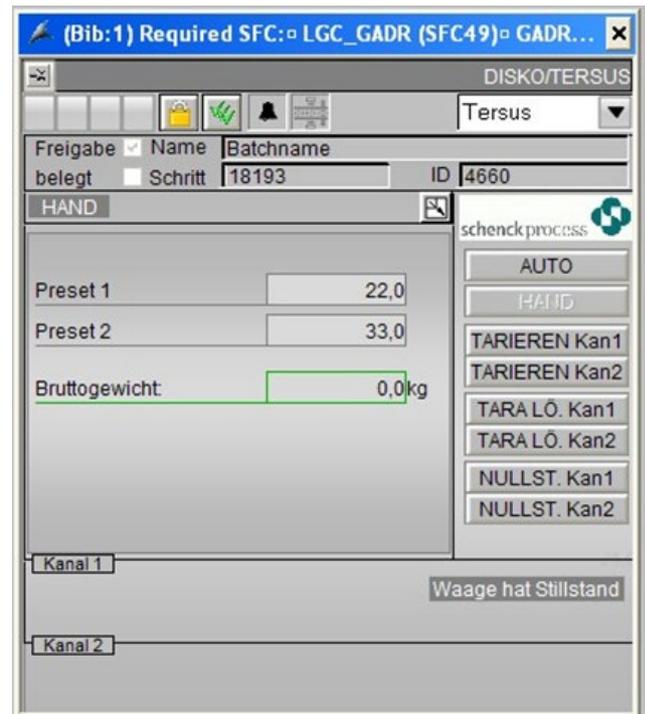
Faceplate: DISOMAT Tersus

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 seriesS7-1200/1500 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.

Example: SIEMENS PCS 7 system with DISOCONT Tersus
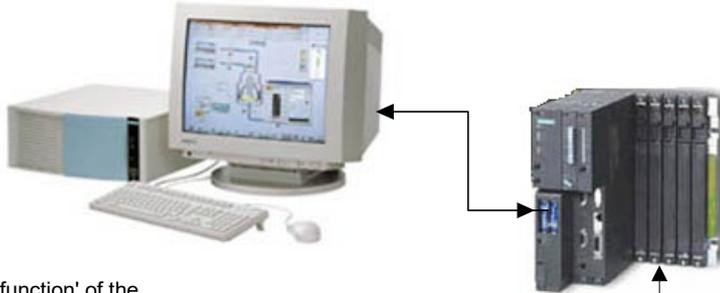
'Substitute function' of the
PCS 7 module:
It conceals the subordinate
communication.

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

PROFIBUS/
PROFINET

Inputs

Outputs
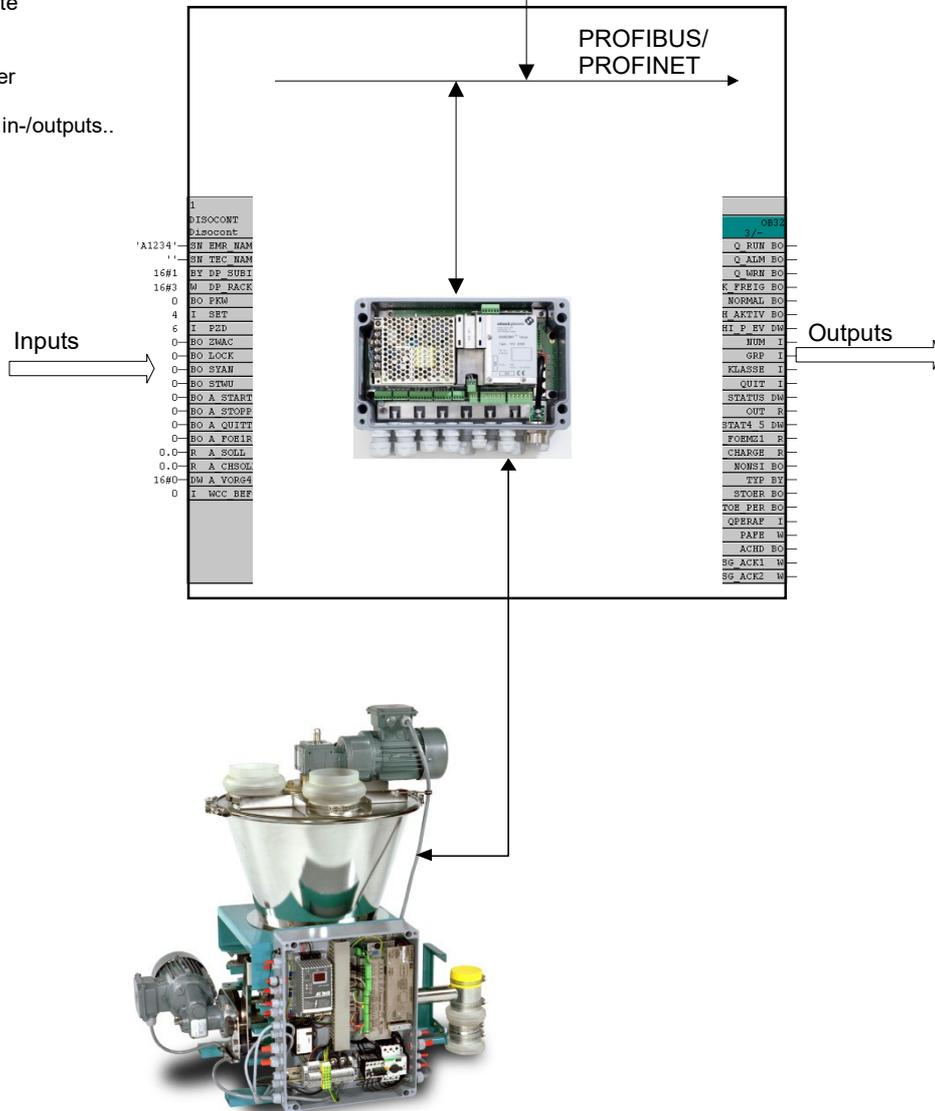
Manuals for PCS 7 modules:

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 DISCONT 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 DISCONT Tersus add-on module for **DP_V1**	V594373.B01
VSP 28030 VTA 28030	**VSP 28030** STEP7 library and **VTA 28030** TIA library	W046355.B01

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