



Marketing Information

Combics Pro
Premium Terminal

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The Success Story

Sartorius indicators, process controllers and user-programmable terminals provide extensive, time-tested solutions for the most diverse applications. Our goal is to continue to improve upon our already successful products in order to provide you with innovative products in the future as well.

The new **Sartorius Combics Pro Terminal** is the result of our own experience as well as the suggestions of experts from our various partner companies. In our opinion, it sets new standards.

The terminal features a fully graphic, color display, is completely compatible with regard to networking, offers a variety of available interfaces, and features a hygienically designed housing. A newly devised, graphic development tool makes programming the terminal extremely simple. Upon request, Sartorius can provide additional, reliable programming support.

The strengths of the Combics Pro at a glance:

- Optimized user interface**
- Connectivity**
- Hygienic design**
- Programmable with graphic elements**

The Combics Pro terminal has been updated with several new features, such as:

- : A new processor**
- : A new operating system**
- : A color display for the first time on a Sartorius terminal**
- : Newly designed display elements**
- : A newly designed housing**
- : Newly created tools for installation and startup**

Helpful Previous Knowledge

If you're familiar →
with and have worked
with the

isi30



X4/X5



then tomorrow you
can work with the →



**Combics Pro
"Counting"**

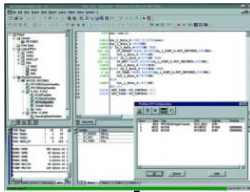


**Combics Pro
"Mixing"**

1 Name is subject to change

If you're familiar →
with and have worked
with the

PR1750



PR1750



**Combics Pro
"Programmable"**

then tomorrow you
can work with the →

**Simple
programming
languages**



GDT



**Combics Pro
"Programmed with the new
graphical development tool"**

The Combics Pro Terminal



- : LCD color graphic display with 320 x 240 dots
- : Scale keys for ON/OFF, toggling, gross weight/tare weight display, zeroing, taring, print/data output
- : Function keys, alphanumeric keypad, navigational keys, 5 soft keys
- : Date/time functions
- : PC keyboard or bar code scanner can be directly connected
- : RS 232 interface (installed)
- : LAN adapter with 10 / 100 Mbit/sec (installed)
- : Expandable through interface cards (3 + 1 slots)
- : Additional 2 slots/for internal balance electronics (A/D converter)
- : Can connect a maximum 62 platforms/scales via xBPI protocol
- : Can connect 2 platforms/scales via SBI protocol
- : Customer-specific print formats can be stored
- : Stainless steel housing
- : Front plate features IP67 protection rating; back features IP30 protection rating (IP67 rating optional)
- : Suitable as a table-mounted, wall-mounted or control panel unit (see Accessories)

The Optimized User Interface

Large color, graphic display | clearly organized controls

The terminal is easy to operate, and the color-supported, clear prompts for operator guidance are visibly new. Controls on the user interface are well organized and enable the user to quickly locate the desired information or key.

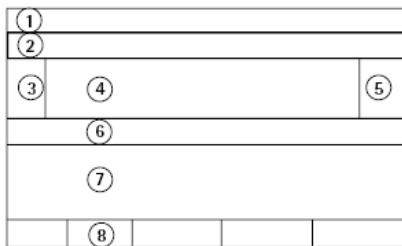


The Display

Find your way around without losing time.

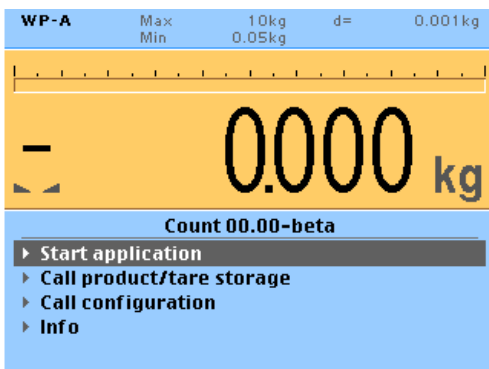
For the first time, a color display has been installed on a Sartorius weighing terminal. The design and display elements on the graphic display are clearly new. The large color display adds considerably to the simple, intuitive prompts for operator guidance.

..the clearly organized display ...

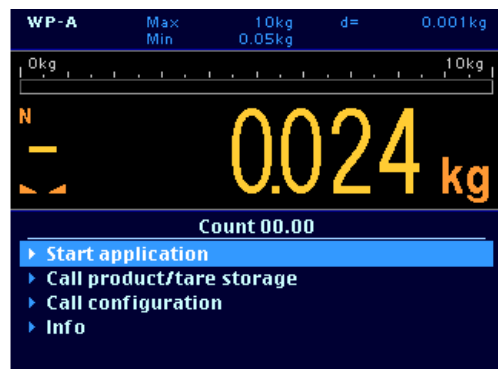


- 1) Line for metrological data
- 2) Bar graph
- 3) Plus/minus sign, stability symbol
- 4) Line for measured values
- 5) Unit, calculated values
- 6) Application symbol
- 7) Text lines
- 8) Soft key labels

... shown in light colors that are easy on the eyes



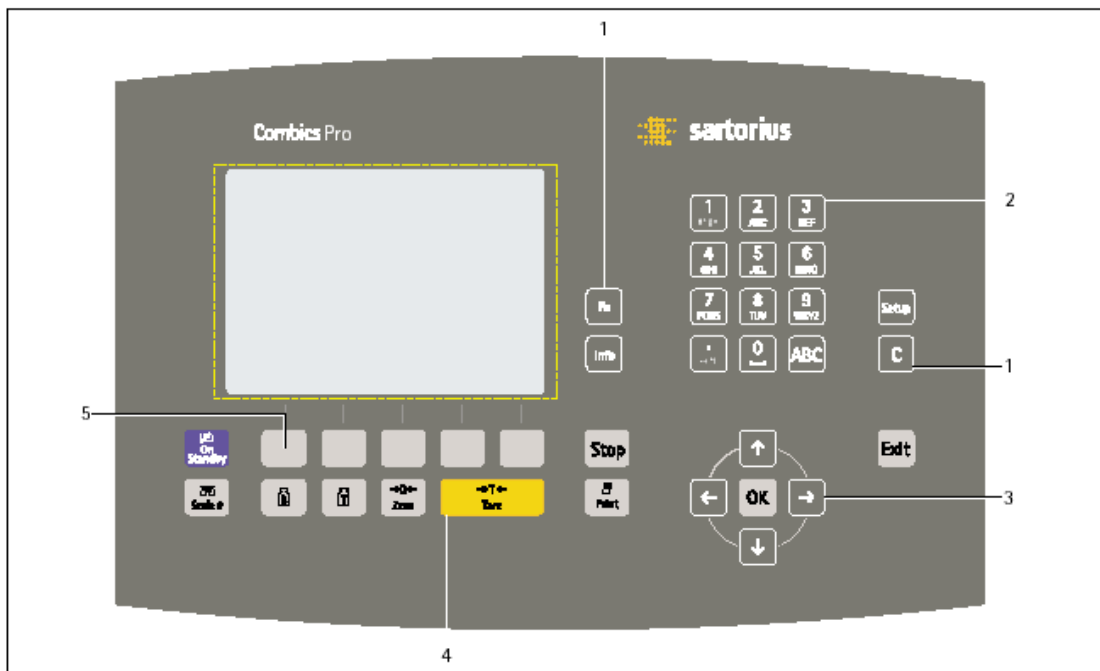
... or bold, dark colors



Which display design do you like better? It's your choice.

The backlit display features 20 mm-high digits to indicate the weight readout. This enables the user to clearly read the display at a greater distance and ensures excellent readability, even in low-light conditions. The contrast of the display can be adapted via the menu. In addition, a bar graph is included in the display, which simplifies filling and checkweighing procedures. Of course on the Sartorius Combics Pro, the elements for displaying the selected user program, the digital readout and explanatory text support the prompts for operator guidance.

The Function Keys

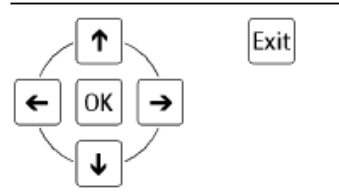


1) Function keys

	Function key
	Info key
	Stop key
	Access Setup menu
	Delete individual characters
	Exit program Exit menu
	Switch on/standby mode

2) Alphanumeric keys

3) Navigation keys

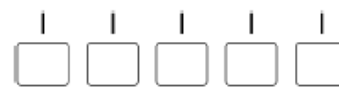


4) Keys for weighing functions

	Display gross weight
	Display tare weight
	Tare Current tare value is stored in tare memory
	Print
	Toggle between connected weighing platforms
	Zero key Zero display of gross weight - At stability - When weight is within zeroing range

5) Soft keys

The menu-guided line for soft key commands appears in the lower line of the display.



The Types of Housings

Stainless steel | IP67 protection rating | flush mount

Clean terminal - hygienic design without corners or edges



Standard model with IP30 protection

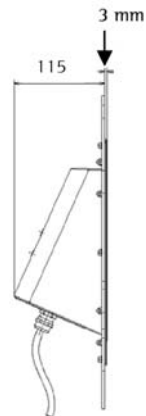
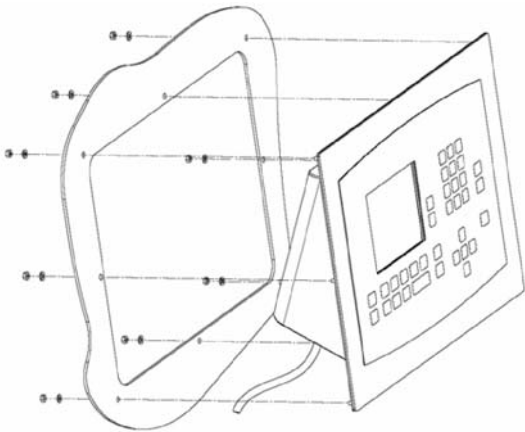


Optional model with IP67 protection



Flush mount

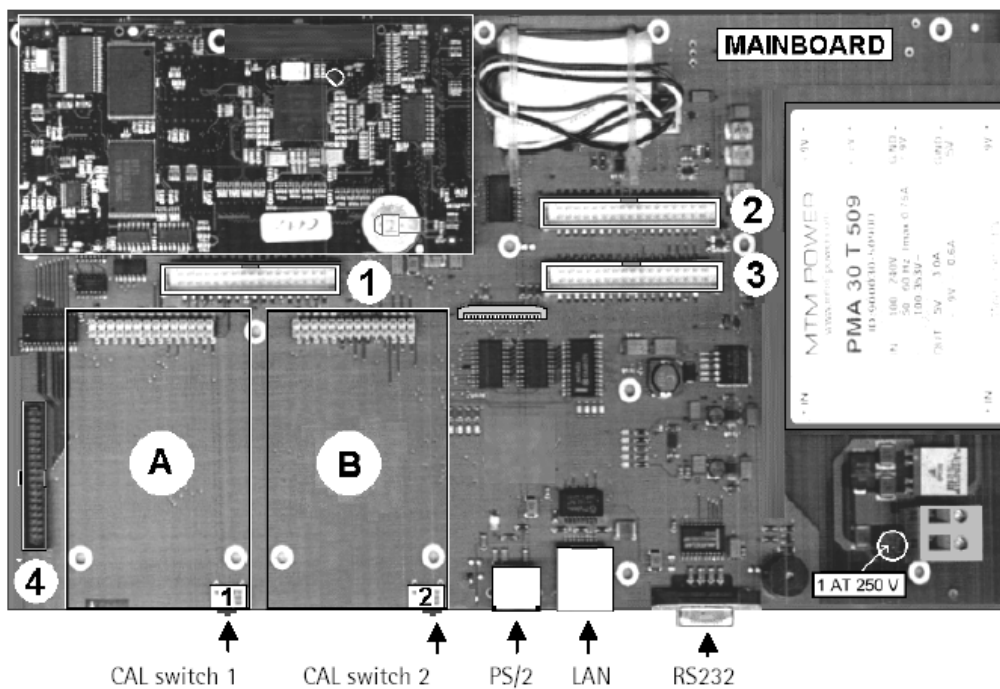
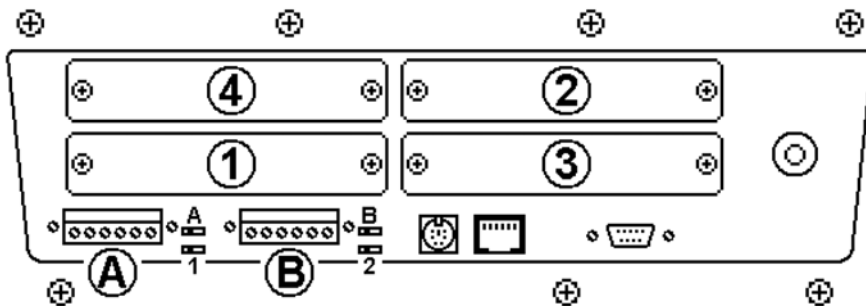
Front plate for flush mounting on the control panels or walls in pharmaceutical plants.



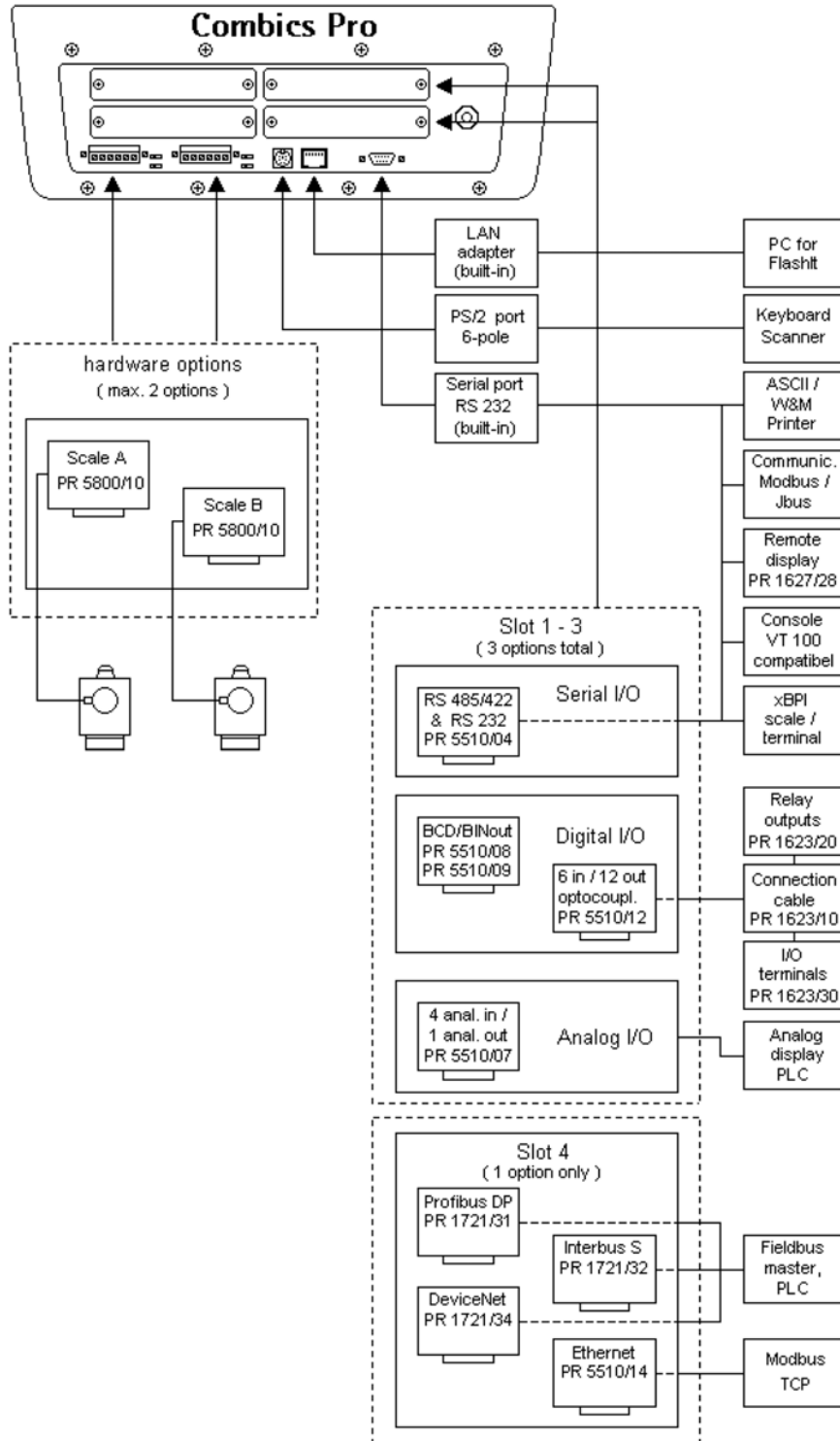
The Interfaces

You'll always find the right interface

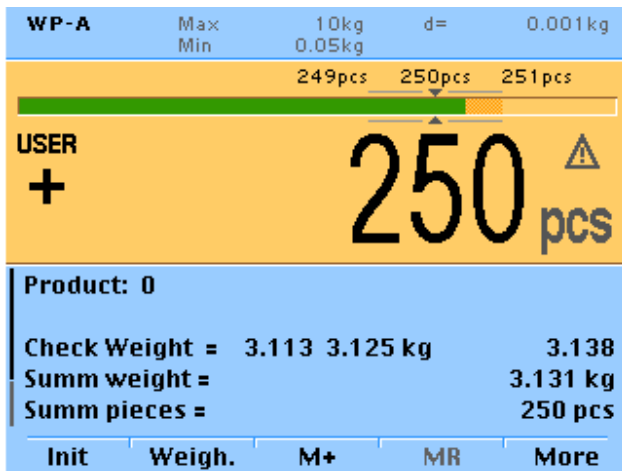
3 standard interfaces | 6 additional, optional interfaces
 (Ethernet, RS232, PS/2) (2 internal WP, 3 interfaces, 1 field bus)



Overview of the Connection Possibilities



The Combics Pro Terminal with the "Counting" Application Package



The Performance Features in Overview

- : Counting application
- : Checkweighing application
- : Totalizing application
- : All applications can be combined with one another
- : User operating rights can be assigned
- : 6,000 product memories
- : 10,000 tare memories
- : Tare memories can be related to product memories
- : Optional internal alibi memory
- : Up to 3 weighing platforms can be connected
- : Configurable print protocols

The Performance Features in Detail

Counting

- : Reference piece weight and reference piece count can be entered via keyboard
- : Reference piece weight can be entered via bar code scanner
- : Reference weight »wRef« can be transferred from the scale
- : Automatic piece weight optimization
- : When the scale is switched on, the last reference piece count used "nRef" (factory setting: 10 pieces) and the last reference piece weight used "wRef" are displayed
- : Toggle between piece count and weight by pressing a soft key
- : Counting with two equal weighing platforms
- : Counting with a reference scale and a counting scale
- : Scales are automatically alternated during determination of the reference piece weight (when [Start] is pressed, the program automatically switches to the higher-resolution scale, the value on the high-resolution scale is automatically accepted, and the program automatically switches back to the counting scale.)
- : Counting with up to 3 weighing platforms
- : Automatic taring of the weight of a container
- : Counting application can be combined with checkweighing and totalizing applications

Checkweighing

- : Enter target and tolerances via the keypad or by transferring the current weight
- : In the product memory: target (weight or piece), tolerances (min./max.value or % deviation)
- : Color bar graph (yellow/green/red) in the display
- : Operation of control outputs
- : Automatic printout of results
- : Automatic initialization when scale is switched on
- : Main display can be toggled from weight readout to tolerance readout (LL HH display)
- : Checkweighing application can be combined with weighing or counting and totalizing applications

- Totalizing**
- : 1 totalizing memory per product memory (net, piece)
 - : Up to 999 items with item counter
 - : Last items can be deleted (canceled)
 - : Current item counter displayed in the text lines
 - : Automatic printout generated when item is transferred
 - : Automatic printout of results
 - : Automatic taring of the weight of a container
 - : Automatic initialization when scale is switched on
 - : Simultaneous storage of net values and calculated values (if available)
 - : Weigh toward a total weight using the display of the totalizing memory plus the current weight on the active weighing platform in the text lines
 - : Manual or automatic transfer of the weight displayed on the scale
 - : Fail-safe storage of the totalizing memory after Combics Pro is switched off
 - : Totalizing program can be combined with the weighing, counting or checkweighing programs

- Product and tare memory**
- : 8,000 product memories or 40,000 tare memories with dynamic memory management (e.g., 6,000 product memories for reference weight, article description., 4 IDs, ... and 10,000 tare memories)
 - : Tare memories can be related to product memories
 - : Search recognition (by entering the first letter of a stored product)
 - : Full memories and available memory space shown in the configuration menu

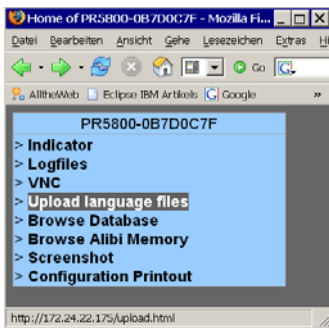
- Additional functions**
- : Assignment of user access rights (with user name and PIN)
 - : Bar code scanner for reference weight, preset tare, IDs, access to product or tare memory
 - : Up to 3 weighing platforms can be connected
 - : Configurable print protocols
 - : Internal, optional alibi memory
 - : Printout of the application configuration

The Tools for Combics Pro

Web Interface



Can be accessed via an internet browser.



- Functions:
- : View the database
 - : View the alibi memory
 - : Create screen shots

VNC



VNC 3.3.7 (virtual network computing)
Consists of platform-specific client software (**vncviewer**) on the local PC and platform-specific server software (**vncserver**) on the remote computer, Combics Pro (remote system) in this case.



- Functions:
- : Display of the complete Combics Pro with all operating possibilities

VNC can also be accessed via the web interface.

Power Tools

FlashIt!



Functions:
: For downloading projects (programs) into the Combics Pro terminal

poEdit



Functions:
: A PC-based program used to create and edit texts from Combics Pro
(similar to the X family : Translatelt!)

Sartorius NICE Label Express



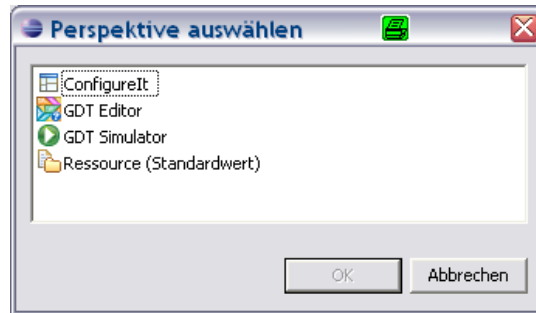
Functions:
: A PC-based program used to design formats for printouts for Combics Pro
(should be used without LayoutIt!)

AccessIt! (OPC Client)



Functions:
: For uploading/downloading and editing the internal database tables
in MS-ACCESS format as *.mdb on the PC

Sartorius Workbench



ConfigureIt!

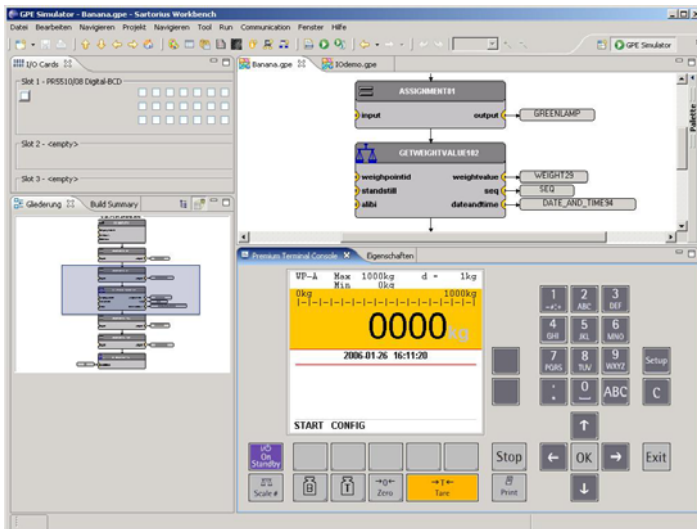
Used to configure/calibrate as well as backup the database and EAROM (instead of Hyperterminal and RecoverIt!)

Functions:

- : Entering parameters
- : Protect all parameters, databases and contents of the Combics Pro EAROM on the PC (Backup)
- : Restore all parameters, databases and contents of the EAROM in Combics Pro from the PC (Restore)
- Calibrate Combics Pro

The New Graphical Development Tool (GDT) PR1750/60

This program development tool features "fully graphic programming" to create program sequences with dialog tables as well as weighing and filling functions.



Functions:

- : Fully graphic programming
- : High-performance simulation of operation as well as the inputs/outputs
- : Automatic project generation
- : IEC-61131/3-compliant programming
- : Debug system with online debugging and monitoring during operation
- : Support for project documentation

Accessories

Description	Order number
Interface modules	
Analog/digital converter, incl. grounding plate PR5800/10	940535800101
Serial interfaces (RS 232/485) PR5510/04	940535510041
1 analog output / 4 analog inputs PR5510/07	940535510071
BCD-Out open emitter PR5510/08	940535510081
BCD-Out open collector PR5510/09	940535510091
6 control inputs / 12 control outputs, Opto / Opto PR5510/12	940535510121
Ethernet, 10M baud PR5510/14	940535510141
Profibus DP PR1721/31	940531721311
Interbus S PR1721/32	940531721321
DeviceNet PR1721/34	940531721341
CC-Link PR1721/35	940531721351
Printers and printing accessories	
Verifiable strip/label printer with thermal transfer printing unit; accommodates paper width up to 60 mm, with external 100 -240 volt power supply Connecting cable required: CISPRO: YCC03-D09M6 (M16) *1	YDP04IS-0CEUV
Verifiable strip/label printer with thermal transfer printing unit; accommodates paper width up to 108 mm, with external 100 -240 volt power supply and power cord (EU+US), can only be used with flexible formatting options for printouts; connecting cable required: Connecting cable required: CISPRO: YCC03-D09M6 (M16) *1	YDP12IS-0CEUV
Labels for the YDP04IS-0CEUV + YDP12IS-0CEUV:	
Labels, 58x30 mm (1000 pcs)*	69Y03092
Labels, 58x76 mm (500 pcs)*	69Y03093
Labels, 58x100 mm (380 pcs)*	69Y03094
Labels for the YDP12IS-0CEUV: 101 x 127 mm (305 pcs) *	69Y03195
Printer paper for the YDP04IS-0CEUV + YDP12IS-0CEUV:	
3 paper rolls; 60 mm x 75 m, thermal paper *)	69Y03090
Printer paper for the YDP12IS-0CEUV:	
1 paper roll, 101 mm x 75 m, thermal paper *)	69Y03196
Verifiable strip/label printer with thermal transfer printing unit; accommodates paper width up to 108 mm, with external 100 -240 volt power supply and power cord (EU+US), can only be used with flexible formatting options for printouts; connecting cable required: Connecting cable required: CISPRO: YCC03-D09M6 (M16) *1	YDP12IS-0CEUVTH
3 color ribbons for the YDP12IS-0CEUVTH *)	69Y03234
Verifiable printer with functions for date, time and statistical evaluations Connecting cable YCC03-D09F6, required for CISPRO *1	YDP03-0CE
5 paper rolls, 50 m each, for the YDP03-0CE/YDP04*)	6906937
Ink ribbon cartridge (replacement) for the YDP03-0CE/YDP04*)	6906918

*) Expendable items – see the Industry price list for discounts

*1 only for CISPRO with option L6, or YAS01CISPRO

Accessories

Description	Order number
Electrical accessories	
Bar code scanner for connection to a CIS, FC; with connection cable, 120 mm scanning width YCC03-BR02 (M8) adapter cable required	YBR02FC
Cable terminal box, stainless steel, for connecting up to 4 weigh cells in one platform or for external mounting, PR6130/64S	940536130642
I/O connection module for 12 relay outputs and 6 inputs PR1623/20	940531623201
I/O connection module for 12 outputs and 6 inputs PR1623/30	940531623301
Other accessories	
Dust covers (2 pcs)	YDC02CISPRO
Cable gland (PG) for cables with diameters ranging from 4.5 to 9 mm, IP67, M16 x 1.5	YAS04CIS
Software	
Software for flexible formatting of printouts on a PC, "Sartorius NICE Label Express", with subsequent transfer to the operating unit or scale (only for CIS(L)2,3; CISPRO, CIXS3; FC; FD; FCT01-X; isi10/20/30)	YAD02IS
Application Software for Combics Pro	
Internal alibi memory (license) PR8901/81	940538901811
OPC-Server-Communication (license) PR1792/13	940531792131
Cables	
4 m connection cable with D-Sub 37 for PR1623/20 or PR1623/30	940531623101
Connection cable with cable gland, for YBR02FC bar code scanner, open cable ends to 5-contact DIN female connector, 1 m	YCC03-BR02
Adapter cable for YBR02FC bar code scanner	YCC04-BR02
Connection cable with cable gland for YDP12/04IS printer, open cable ends to 9-pin D-SUB male connector, 6 m	YCC03-D09M6
Connection cable with cable gland for YDP03 printer or PC, open cable ends to 9-contact, D-SUB female connector, 6 m	YCC03-D09F6
Connection cable with cable gland for Sartorius scale, open cable ends to 25-pin D-SUB male connector, 6 m	YCC03-D25M6
Connection cable with cable gland for Sartorius scale, open cable ends to 12-contact round female connector, 6 m	YCC03-R12M6
Connection cable with cable gland for accessories and IS platforms, open cable ends to 12-contact round, female connector, 6 m	YCC03-R12F6
Connection cable with cable gland (PG), open cable ends to open cable ends, 6 m	YCC02-RELAIS02
Connection cable for YDA01C-20MA power interface, with open cable ends, e.g., 5 x = 5 m	6906926

Accessories

Description	Order number
Mechanical accessories	
Male/female connectors - set to connect platforms to the indicator	YAS99I
IP67 kit	YAS01CISPRO
Kit for connecting a control panel	YAS04CISPRO
Front plate for flush mounting	YAS05CISPRO
Wall retainer, stainless steel	YAS06CISPRO
Floor-mounted column, height 1.1 m	YDH03CIP
Floor-mounted column, stainless steel, height 1.1 m	YDH03CIS
Base for installing the floor-mounted column, stainless steel (4 bars)	YBP03CIS
Retainer for bar code scanner, can be connected to: floor-mounted column, bench stand, complete scale column	YBH01CWS
Plate for attaching a printer to the floor-mounted column or bench stand	YPP01CWS

Text for Offers

CISPRO Combics Pro Stainless Steel Terminal

=====

High-contrast, backlit color graphic display with 320 x 240 pixel resolution.
Large keys, with positive click action, acoustic confirmation and high-contrast labeling. Alphanumeric keypad with ABC input, 5 soft keys. RS232 data interface, Ethernet and PS/2 standard. Optional: 6 additional interfaces can be plugged in

=====

- Housing material: Stainless steel 1.4301
 - Temperature range: -10° to +40 °C
 - Voltage rating:
 100-240 VAC(-15/+10%), 48-62 Hz
 - Dimensions (WxDxH): 377x260x145 mm
 - Weight: approx. 3.8 kg
- =====

Product Support Literature

(Means of Communication)

Product Support Documentation

The "product support documentation" you have received is also available in file format (Word or PDF) on a CD.

Please ask your Sartorius dealer about this CD.

Instruction Manual

Publication numbers

Language		English
Device		
Installation manual		98648-013-78
Counting application package		98648-013-68

The product support package for Combics Pro includes

- : Marketing information
- : Faxable product data sheets (as computer files)
- : 2 brochures (Basic unit, "Counting" application package)

Additional documentation regarding Combics Pro is available on a Combics Pro marketing CD (including low-resolution product photos). Upon request, we can also provide CDs with high-resolution photo files that are optimized for printing.

Please contact your regional Sartorius marketing representative if you would like further information.

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