

# SECUTEST | SI+

## Memory and Input Module

3-349-612-03  
1/12.10

- **Real-time clock with date function**  
battery buffered
- **Data memory** (only SECUTEST .../SECULIFE ST)  
Measurement values can be stored for up to 500 protocols
- **Alphanumeric keyboard**  
Test results can be annotated for the SECUTEST .../SECULIFE ST, METRISO 5000 D-PI and PROFITEST 204 test instruments, e.g. specific data on system, DUT, customer and repair
- **Data interfaces**  
for tester: RS232  
for PC: RS232 and USB



### Applications

The SI (Storage Interface) module **SECUTEST SI** is a special accessory for the test instruments of the SECUTEST .../SECULIFE ST, PROFITEST 204 and METRISO 5000 D-PI series.

It is installed in the lid of the test instrument and fastened with two knurled screws.

The test results determined with the test instruments are directly transferred to the SI module via the RS232 interface.

The test results can be saved on site with the respective time and date in the form of clear and document-safe measuring and test protocols.

### Transmission of stored data to the PC (only SECUTEST .../SECULIFE ST)

The SI module is equipped with an RS232 and an USB interface. The interface allows for subsequent uploading of stored data to a PC independent of the test instrument, where they can be processed with the ETC, **PS3**, PC.doc-WORD/EXCEL, PC.doc-ACCESS, ELEKTROmanager, PROTOKOLLmanager oder PAT-manager software programs.

### Barcode or RFID scanner option (only SECUTEST .../SECULIFE ST)

Barcode or RFID scanner (accessory) can be linked to the RS232 connection of the SI module. The information available in the form of barcodes or RFID tags can be safely integrated in the test protocols in an efficient and easy manner. This kind of data input enables the user to record substantial data quantities in a timesaving and cost-effective manner, e.g. for series measurements of instruments provided with barcodes or RFID tags.

### Comparison of Memory Adapters / Testers with memory option

Features	SECUSTORE (Z745U)	SECUTEST SI (M702F)	SECUTEST SI+ (M702G)	SECUTEST PSI (GTM5016000R0001)	SECUTEST SIII+ ... Feature KB01 SECULIFE ST	SECUTEST S2N + Option DBmed
Integrated printer for recording charts	—	—	—	•	—	—
Annotations via keyboard	—	•	•	•	—	—
Data memory (flash)	•	—	—	—	—	—
Data memory (battery buffered)	—	•	•	•	•	•
Protocol functions	•	•	•	•	—	—
Statistical evaluation of up to 8 instrument classes	—	•	•	•	—	—
Data transmission to PC via RS232-Interface	•	•	•	•	•	•
Data transmission to PC via USB-Interface	—	—	•	—	—	—
Connection of a barcode scanner	•	•	•	•	•	•
Connection of an RFID scanner	•	•	•	•	•	•
Storage of function test values	•	•	•	•	—	—
Storage of comments on DUT	—	•	•	•	—	—

\* only function when used with PROFITEST 204 und METRISO 5000 D-PI

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## Memory and Input Module

### Applicable Regulations and Standards

IEC/EN 61 010-1:2001 VDE 0411-1:2002	Safety requirements for electrical measurement, control and laboratory devices – General requirements
DIN EN 60 529/ VDE 0470 Part 1	Test instruments and test procedures, protection provided by enclosures (IP code)
DIN EN 61 326-1 VDE 0843-20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements

### Reference Conditions

Operating voltage for connection to test instrument	9 V $\pm$ 0.5 V DC or 8 V $\pm$ 0.5 V rectified
Ambient temperature	+23 °C $\pm$ 2 K
Relative humidity	40 ... 60%

### Data Memory (only SECUTEST .../SECULIFE ST)

RAM (Data)	100 kByte up to 500 tests, depending on the scope of master data
Real-time clock with date function	buffered by a permanently installed lithium battery

### Ambient Conditions

Operating temperature	0 °C ... 40 °C
Storage temperature	- 20 °C ... + 60 °C; except batteries
Relative humidity	max. 75%, no condensation allowed
Elevation	max. 2000 m
Deployment	indoors

### RS232 Data Interface

Type	RS232, serial, per DIN 19241
Operating voltage	6.5 V ... 12 V for connection to test instrument
Current consumption	40 mA typical
Baud rate	9600 bauds
Parity	No
Data bits	8
Stop bit	1

### Electromagnetic Compatibility (EMC)

Interference emission	EN 61326-1:2006 class B
Interference immunity	EN 61326-1:2006

### USB Data Interface

Type	USB 1.1
Operating voltage	<b>when connected to the test instrument:</b> 5 V DC $\pm$ 10% from the RS232 interface of the test instrument <b>when connected to a PC:</b> (without connection to the test instrument): 5 V DC $\pm$ 10% from the USB interface of the PC
Current consumption	40 mA typical
Baud rate	9600 bauds
Parity	none
Data bits	8
Stop bit	1
Terminal assignment	Type B 4 pin, 1: VCC, 2: D-, 3: D+, 4: GN

### Auxiliary power

#### Voltage Supply

for connection to the test instruments	via pin 9 of the RS232 interface 6.5 V ... 12 V, typically 9 V
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### Mechanical Configuration

Protection	IP20 for the housing
Dimensions	240 mm x 81 mm x 40 mm (without knurled screws and ribbon cables)
Weight	approx. 0.4 kg

### Scope of Supply

- 1 SI module
- 1 Operating instructions

The RS232 interface description is available on our website [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com).

### Accessories

see order information

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## Recording of the measured results (only SECUTEST .../SECULIFE ST)

The result of the last test at a time can be entered into the SI module where it can be stored under an ident number and annotated. In addition, the measured results as well as further information can be shown on the LC display of the test instrument.

### Example of a complete test protocol

```
To Socket CL I
Test Results
-----
MEAS. VALUES | LIMITS
RPE      0.315 Ω | <1.000 Ω
RINS     2.00 MΩ | >1.000 MΩ
UINS     523 V   | 500 V
IEHL     0.115 mA | <3.500 mA
-----
Passed!
← New ▲▼ Page Ⓞ Fnc.
```

```
on test socket PC I
Heating elem./capacitor

Visual inspection
Passed

▲ Meas. values
▼ Functional test
← return
```

```
Functional test

Pmax      18 W
LF        0.34
Imax      0.23 A
W         0.000 kWh
t         00:00:01

▲ Visual inspection
▼ Test item
← return
```

```
Information on item
Type of unit:

Manufacturers:

Type:

Ident number:
-

▲ Functional test
▼ Customer
← return
```

```
Information on customer
Name:
-
Street number:

Zip code:

Town:

▲ Test item
▼ Repair
← return
```

```
Information on repair
-

▲ Customer
← return
```

## Statistical evaluation of the measured results (only SECUTEST .../SECULIFE ST)

Altogether, statistical data of a maximum of eight instrument classes can be recorded.

The statistical data includes the number of the errors occurred as well as their percentage of the total measurement within one class.

After recording, this data can be shown on the LC display of the SECUTEST .../SECULIFE ST .

### Example of statistical results on display

```
print:
all
return
> Office      ERRORS
Private      first ←
Klasse D     first
Klasse E     first
Klasse G     all
Klasse H     first
first

▲▼ select
← execute
```

```
Office - first error
Test items:      Number: %
Visual error:   1 5.5
RPE:            16 88.8
SUM ISO:        0 0
RINS           0
IELC           0
IPROBE         0
ΔI             0
SUM OF ERRORS:  17 94.4
← to statistics menu
```

## PC evaluation software

### Report and List Generation and/or Test Data Management

The following software packages are optionally available for read-out, documentation and further processing of stored data:

- ETC
- PC.doc-WORD/EXCEL
- PC.doc-ACCESS
- PROTOKOLLmanager
- ELEKTROmanager
- PS3
- patManager

An overview of the performance features provided by the software is given in a separate data sheet.

# SECUTEST | SI+

## Memory and Input Module

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### Order Information

Designation	Type	Article number
SI module with the languages D (German), GB (English), F (French), NL (Dutch), I (Italian), E (Spanish) and CZ (Czech), including operating instructions in German/English	SECUTEST SI+	M702G
<b>Accessories</b>		
Barcode scanner, printer and RFID scanner see separate datasheet ID systems		
<b>PC Analysis Software</b>		
For further information on software, please refer to our website <a href="http://www.gossenmetrawatt.com">http://www.gossenmetrawatt.com</a> (→ Products → Electrical Testing → Testing of Electr. Appliances → SECUTEST ...)		
or <a href="http://www.gossenmetrawatt.com">http://www.gossenmetrawatt.com</a> (→ Products → Software → Software for Testers)		

For additional information on accessories, please refer to:

- our Measuring Instruments and Testers catalogue
- our website [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)

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