# **Technical Information**

Page 1 of 3

Part No.: 7100.PGT120.COM



◆ Untere Gießwiesen 21 ◆ 78247 Hilzingen ◆ Germany ◆ Tel.: +49-7731-8688-0 ◆ info@warmbier.com

PGT®120 Personnel Grounding Tester with RS232 interface

(Part No.: 7100.PGT120.COM)

- The Personnel Grounding Tester PGT®120 is a wrist strap and footwear tester for access control of ESD protected areas (EPA)
- The test result is indicated with audible and visual signals.
- A relay with a dry contact provides the connection to a door opening system. (Adjustable door opening time 1s and 3s)
- RS232 interface to process measurement data and test results in ASCII, i.e. with time attendance systems
- Power supply: External power supply unit
- Wrist strap, right and left shoe testing is simultaneously possible by separate measuring circuits
- In combination with a barrier gate, the footwear measurement can be performed in series <u>without</u> pressing a contact electrode (handsfree mode).
- · Separate measurement of left and right shoe
- Lower limit disabling is possible for shoe testing and wrist strap testing
- Beeper can be configured and disabled
- The unit can be used on bench tops or as a wall mounted unit (Wall mounting requires an additional wall mounting plate)

## **Test mode and limit values:**

	Measuring range / Test voltage	Standard	
Wrist strap / coil cord	$(750~\text{k}\Omega^*)$ - $35~\text{M}\Omega$ * lower limit can be disabled	IEC 61340-5-1	
Footwear worn on metal plate (values for each shoe)	(100 k $\Omega^*$ ) - 20 / 35 / 70 / 100 M $\Omega$ * lower limit can be disabled	IEC 61340-5-1	
Footwear in series	$40$ / $70$ / $140$ / $200$ M $\Omega$ (both shoes in series)		
Test voltage (without load)	100V/DC changeable to 50V or 30V	IEC 61340-5-1	



<u>Dimensions:</u> 150 x 200 x 65 mm

 $C \in$ 

- ▶ 1 year limited warranty
- ► Recommended calibration interval: 2 years
- ► Persons with active implants (i.e. pacemakers) should use the Personnel Grounding Tester only after consultation with a specialist.

### Supplied with:

- Footwear electrode,
- Power supply 240V/12
- Manual and calibration certificate (German/English)



Picture: Footwear electrode for separate shoe testing (350 x 500 x 8 mm)

# **Technical Information**

Page 2 of 3

Part No.: 7100.PGT120.COM



◆ Untere Gießwiesen 21 ◆ 78247 Hilzingen ◆ Germany ◆ Tel.: +49-7731-8688-0 ◆ info@warmbier.com

### **Interface description**

A computer or a terminal can be connected to the serial RS232 interface.

Data is in ASCII format, a computer with terminal program is sufficient to monitor measurement data in plain text.

**Connection:** Western modular RJ45 socket on the rear.

Pin 4 = GND Pin 5 = RxD Pin 6 = TxD

COM 87654321

Connector View

Interface settings: 9600 baud, 8 data bit, no parity, 1 stop bit (9600,8,n,1)

Data is embedded in control character <STX> = "Start of Text"

<STX> = "Start of Text" (ASCII 002) and <ETX> = "End of Text" (ASCII 003)

No.	Description	Start	Prefix		Data	End	
1	value footwear in series	<stx></stx>	RSG	<sp></sp>	value in kOhm	<etx></etx>	<cr> <lf></lf></cr>
2	value wrist strap	<stx></stx>	RHG	<sp></sp>	value in kOhm	<etx></etx>	<cr> <lf></lf></cr>
3	value left shoe	<stx></stx>	RSL	<sp></sp>	value in kOhm	<etx></etx>	<cr> <lf></lf></cr>
4	value right shoe	<stx></stx>	RSR	<sp></sp>	value in kOhm	<etx></etx>	<cr> <lf></lf></cr>
5	test OK	<stx></stx>	ERG	<sp></sp>	ОК	<etx></etx>	<cr> <lf></lf></cr>
6	test failed	<stx></stx>	ERG	<sp></sp>	Error no.	<etx></etx>	<cr> <lf></lf></cr>

<CR> = control character "Carriage Return" (ASCII 013) <LF> = control character "Line Feed" (ASCII 010) <SP> = Space (ASCII 032)

**Example:** 

Data: <STX>RHG 2671<ETX><CR><LF>

<STX>ERG OK<ETX><CR><LF>

Sense: Resistance wrist strap 2,671 MOhm,

Test result OK

Please read the user's manual for details about interface commands and error codes.

# **Technical Information**

Page 3 of 3

Part No.: 7100.PGT120.COM



♦ Untere Gießwiesen 21 ♦ 78247 Hilzingen ♦ Germany ♦ Tel.: +49-7731-8688-0 ♦ info@warmbier.com

# Version with DIP 12 switches (from SN: 01000 on):



The unit can be configured with DIP switches in the back side of the unit.

### **Options:**

- "OR" (wrist strap test <u>or</u> shoe testing)
- "only shoes"
- "only wrist strap testing"
- "AND" (wrist strap <u>and</u> shoe testing)

Additionally other functions as i.e. "limit values", "test voltages", "standard test mode" or "Hands-free-modus" can be selected via these DIP switches.

# Optional accessories: Wall mounting plate (stainless steel) Part Nr. 7100.PGT120.WK Calibration Unit for PGT®120/PGT®120.COM with DIP12 Part Nr. 7100.PGT120.CU.12 Part Nr. 7100.PGT120.SM Mat for footwear electrode with yellow bevelled edges Part Nr. 7100.PGT120.SM Part Nr. 7100.PGT120.TS

## **DATA processing:**

- See information about our DATATerminal and TouchScreenPC on our homepage <a href="https://www.warmbier.com">www.warmbier.com</a>