

PHILIPS

Automatic Digital Multimeter

PM 2517X

9447 825 17001

DIRECTIONS FOR USE
 GEBRAUCHSANLEITUNG
 MODE D'EMPLOI
 GEBRUIKSAANWIJZING
 INSTRUCCIONES DE MANEJO
 ISTRUZIONI D'USO
 BRUKSANVISNING



9499 470 15114

V max. between L0 and mains-earth	400Vrms, 580V peak
V max. zwischen L0 and Netzerde	400Veff, 580V Spitze
V max. entre L0 et terre secteur	400Veff, 580V crête
V max. tussen L0 en netaarde	400Veff, 580V piek
V max. entre L0 y tierra de red	400Veff, 580V cresta
V max. entre L0 e terre di rete	400Veff, 580V picco
V max. mellan L0 och nätjord	400Vrms, 580V topp

780414

ENGLISH

INTRODUCTION

The PM 2517X is a compact digital multimeter with automatic ranging facilities and a Liquid Crystal display with a maximum reading of 9999. The instrument can measure V_{DC} , A_{DC} , V_{AC} and A_{AC} true RMS, Ω and \rightarrow connected to the combined $V_{\Omega mA} \rightarrow$ input. For temperatures, measured with the optional thermometer PM 9248 and high currents up to 10A, special input terminals are available. The instrument can be powered by 4x1.5V batteries or with the optional 9V power supply PM 9218.

TECHNICAL DATA

	RANGES	ACCURACY*	INPUT CONDITION	PROTECTION	INPUT
V	999.9mV 9.999V	dc. $\pm 0.2 \pm 0.05$	dc. $10M\Omega$ ac. $2M\Omega$ $\pm 1\%$	dc. $1000V_{DC}$, $1400V_{peak}$	$V_{\Omega mA}$
	99.99 V 999.9V	ac. $\pm 0.5 \pm 0.1^{**}$	dc. $9M01$ ac. $1M802$ $\pm 1\%$	ac. $600V_{AC} + 400V_{DC}$, $1400V_{peak}$	
A	99.99mA	dc. $\pm 0.5 \pm 0.1$	Voltage over shunt $< 200mV$ $< 150mV$	Fuse 315mA quick Max. 9.999A	$V_{\Omega mA}$
	9.999A	ac. $\pm 0.8 \pm 0.1$ (50Hz)			
Ω	999.9 Ω 9.999k Ω	$\pm 0.5 \pm 0.1$	Voltage over Rx $< 4V$	Max. 250Vrms	$V_{\Omega mA}$
	99.99k Ω	$\pm 1 \pm 0.1$			
$^{\circ}C$	$-60^{\circ}C + 200^{\circ}C$	$< 100^{\circ}C \pm 1\% \pm 2^{\circ}C$ $> 100^{\circ}C + 1, -3\% \pm 2^{\circ}C$	With optional probe PM 9248		
	Forward Ge 100.0 – 300.0 mV Si 500.0 – 800.0 mV	Reversed Ge $> 0.. mV$ Si $> 0.. mV$	(Overrange); Driving current 1 mA		$V_{\Omega mA}$
Data Hold	For measurement via the $V_{\Omega mA} \rightarrow$ and common input	With optional probe PM 9263			

* All accuracies in: $\pm\%$ of reading $\pm\%$ of full scale ($^{\circ}C = \pm\%$ of reading $\pm^{\circ}C$)

** At 50Hz: additional error in % of reading: $\pm 0.5\%$ 40Hz–1kHz, $\pm 1\%$ 1kHz–10kHz, $\pm 5\%$ 10kHz–20kHz.
accuracy a.c. ranges valid for $> 1\%$ of range

Temperature coefficient: 300ppm/ $^{\circ}C$; range 9.999M Ω 500ppm/ $^{\circ}C$

General	Overrange indication .0..	Temperature range	Ac. ranges (V_{AC} and A_{AC})
	SMRR d.c. ranges	Reference temp. $+23^{\circ}C \pm 2^{\circ}C$	True RMS measurements
	99.99mV 9.999V 60dB 48Hz...1kHz	Specified $0...+45^{\circ}C$	Cres-factor 2 at end of range.
	99.99 V 999.9V 40dB 48Hz...1kHz		
	CMRR d.c. ranges 100dB		
	a.c. ranges 80dB 50/60Hz		

DIRECTIONS FOR USE

- Power supply:**
- 4x1.5V batteries e.g. Types: Philips R14TR; UM2; U11 (see figure)
 - External 9V power supply PM9218, connected to input 9V EXT.
 - For rechargeable batteries, contact your local Philips organization.

Controls:

1. Liquid Crystal display, max. reading 9999	8. Power switch ON/OFF
2. Function indication	9. Common input
3. Manual ranging indication	10. Combined $V_{\Omega mA}$
4. 1xpress. = 1 Range up (Manual)	11. Fuse 315 mA quick
5. 1xpress. = 1 Range down (Manual)	12. External power supply input (PM 9218)
6. Auto ranging	13. Probe input for PM9248 and PM9263
7. Function selector	14. Additional 10A input (\sim and \rightarrow).
	15. Polarity indication.

Accessories delivered with the PM 2517X

- Measuring leads with testpins
- Carrying case
- 2 Fuses 315mA quick
- Directions for use

Optional Accessories

- HF probe PM 9210
- RF probe PM 9213
- 9V power supply PM 9218
- Shunt PM 9244
- Current transformer PM 9245
- HT probe PM 9246
- Temperature probe PM 9248
- Data hold probe PM 9263