

# MYeBOX

## Portable power analyzer



### Description

MYeBOX is a range of portable analyzers that can be configured from an app that analyses the accessible electrical parameters remotely. MYeBOX measures and records the electrical parameters in single, two or three-phase installations (with and without neutral).

The app is connected to the device to display the data measured in real time, to fully configure the unit, to start or stop the data recording process, to send the recorded data to MYeBOX Cloud and even to access the data in the memory to display them in graphical form or in tables. Remote connectivity allows the unit to analyse all data measured without the need to travel to the site. Data recorded by the unit can also be sent to a data repository for its subsequent analysis in PowerVision Plus. The unit can be configured locally with a capacitive keypad and with the menu options shown on the screen.

The most advanced model, MYeBOX 1500, can measure the leakage current simultaneously, it can measure the network quality parameters in compliance with the **EN 50160** standard and also record the transients.

MYeBOX 150 has the following features and functions:

- 4 voltage measurement inputs ( $U_1, U_2, U_3, U_n$ )
- 4 current measurement inputs ( $I_1, I_2, I_3, I_n$ )
- Measurement of the main electrical parameters
- Energy consumed and generated
- Measurement of network quality parameters
- True RMS measurement (TRMS)
- Measurement of consumption and generation (4Q)
- Voltage quality event log, according to **EN 61000-4-30**
- Transients log
- Recording of the wave shape associated with the quality events and transients
- Measurement according to **EN 61000-4-30**
- Power supply is independent of the measurement
- Recording of the wave shape for each recording period
- LCD Screen
- Capacitive keypad
- Micro-USB port to download data
- Automatic detection of clamps
- Identification of phases with colours
- Compatible with clamps with EEPROM
- Recording of system events (EVA)
- NTP synchronisation
- Sending of alarms via e-mail
- Wi-Fi communications (access point/terminal)

In addition to these features and functions, MYeBOX 1500 also features:

- 1 voltage measurement input  $U_{ref}$
- 1 leakage current measurement input
- 2 transistor inputs to centralise impulses / tariff / state
- 2 transistor outputs for alarms
- 3G communications

### Applications

MYeBOX can be used to:

- Prepare complete studies of an electrical installation.
- Analyse consumption, load curves, disturbances in the installation's voltage, display wave shapes, harmonics study or flicker measurement, among other options.
- Perform audits and analyses remotely.

### Technical features

	Input	MYeBOX 150	MYeBOX 1500
<b>Power supply</b> (AC power supply adapter)	Rated voltage	100...250 Vac	100...250 Vac
	Frequency	47...63 Hz	47...63 Hz
<b>Voltage measurement circuit</b>	Consumption	22... 28 VA	25... 31 VA
	Installation category	CAT II 300 V	CAT II 300 V
	<b>Output</b>	<b>MYeBOX 150</b>	<b>MYeBOX 1500</b>
	Rated voltage	9 Vdc	9 Vdc
	Consumption	18 W	20 W
	Voltage measurement margin	10...600 Vac	
	Frequency measurement margin	40...65 Hz	
	Input impedance	2.4 MΩ	
	Minimum measuring voltage $V_{start}$	10 Vac	
	Maximum voltage input consumption	0.15 VA	
<b>Current measuring circuit</b>	Installation category	CAT III 600 V	
	Measurement of the Phase and Neutral current	Clamps: CPG-5, CPG-100, CPRG-500, CPRG-1000, CPG-200/2000, Clamps with mV/kA output. Transformers with a 250 mA or 333 mV output CFG-5, CFG-10, WGC transformers	
	Leakage current measurement (eBOX-1500 model)		
	Nominal current $I_n$	Depending on the type of clamp	
	Current measurement margin	1...200 $I_n$ %	
	Maximum current, impulse < 1 s	3 x $I_n$ , A	
	Minimum measurement current $I_{start}$	Depending on the type of clamp	
	Maximum current input consumption	0.0004 VA	
	Installation category	CAT III 600 V	
	Phase voltage measurement	Class 0.2 (10...600 Vac)	
	Phase current measurement	Class 0.2 1%...200% $I_n$	
	Active and apparent power measurement ( $V_n$ 230/110 Vac)	Class 0.5 ±1 digit	
	Reactive power measurement ( $V_n$ 230/110 Vac)	Class 1 ±1 digit	
	Active energy measurement (IEC 62053-22)	Class 0.5S	
	Reactive energy measurement (IEC 62053-23)	Class 1	
Frequency measurement	Class 0.1 (40...65 Hz)		
Power factor measurement	Class 0.5		
Voltage THD measurement	Class 1 (IEC 61000-4-7)		
Voltage harmonics (up to the 50 <sup>th</sup> order)	Class 1 (IEC 61000-4-7)		
Current THD measurement	Class 1 (IEC 61000-4-7)		
Current harmonics (up to the 50 <sup>th</sup> order)	Class 1 (IEC 61000-4-7)		
<b>Digital transistor outputs</b> (MYeBOX 1500)	Number of outputs	2	
	Type	Transistor	
	Maximum voltage	48 V	
	Maximum current	90 mA	
	Maximum frequency	1 kHz	
	Impulse width	1 ms	
<b>Digital inputs</b> (MYeBOX 1500)	Impulse duration ( $T_{on} / T_{off}$ )	0.3 ms / 0.7 ms	
	Number of inputs	2	
	Type	Potential free contact	
	Insulation	5 kV	
	Maximum short-circuit current	5 mA	
	Maximum voltage in open circuit	4...9 Vdc	
<b>Wi-Fi communications</b>	Band	2.4 GHz	
	Standards	IEEE 802.11 b / g / n	
<b>3G communications</b> (MYeBOX 1500)	Networks	UMTS/HSPA: 850/900/1900/2100 MHz GSM/GPRS/EDGE: 850/900/1800/1900 MHz	
	Maximum output power	UMTS/3G (Class 3 Power): 24 dBm GSM850/900 (Class 4 Power): 33 dBm GSM1800/1900 (Class 1 Power): 30 dBm	
		Alphanumeric, 20 characters x 2 lines	
<b>User interface</b>	Display	MYeBOX 150: 14 LED MYeBOX 1500: 21 LED	
	Keypad	5 keys, 2 buttons	
	LED	MYeBOX 150: 14 LED MYeBOX 1500: 21 LED	
	Connectivity	micro-USB	
<b>Internal battery</b>	Type	Lithium	
	Voltage	3 V	
	Capacity	220 mAh	
	Service life	10 years	

\* Possibility of power supply at 480 Vac

### Technical features

<b>Battery</b>	Type	Lithium
	Voltage	3.7 V
	Capacity	3700 mAh
	Charging time	6 hours
	Charging temperature	0...45 °C
	Battery life	2 hours
<b>MicroSD memory</b>	Format	FAT 32
	Capacity	16 Gb
	Log period	1 s, 1 min, 5 min, 15 min, 1 h, 1 day
<b>Environmental features</b>	Operating temperature	-10...+50 °C
	Storage temperature	-20 °C...+60 °C
	Relative humidity (non-condensing)	5...95%
	Maximum altitude	2,000 m
<b>Build features</b>	Dimensions	165.96 x 255.68 x 40 mm
	Weight	MYeBOX 150: 950 gr MYeBOX 1500: 975 gr
	Protection degree	IP 30
	Enclosure	V0 self-extinguishing plastic
	<b>Standards</b>	<b>IEC 61010:2010, EN 61326-1:2013, UL/IEC 61010-1 3rd Edition</b>

### References

Type	Code	Voltage / Current inputs	Comms.	Transistor inputs / outputs
kit MYeBOX-150	M84023	4 / 4	WiFi	- / -
kit MYeBOX-1500	M84033	5 / 5	WiFi + 3G	2 / 2

Analysers with built-in SD memory and Cloud Includes voltage cables, alligator clips, USB cable, fastening strap, magnetic support, battery, power supply and carrying bag.

Type	Code	Description
MYeBOX-150-3FLEX45	M8404B	Include kit MYeBOX-150 (M84023) + 3 FLEX-R45
MYeBOX 1500-3FLEX45	M8405B	Include kit MYeBOX-1500 (M84033) + 3 FLEX-R45
MYeBOX-150-4FLEXR45	M8404C	Include kit MYeBOX-150 (M84023) + 4 FLEX-R45
MYeBOX-1500-4FLEXR45	M8405C	Include kit MYeBOX-1500 (M84033) + 4 FLEX-R45
MYeBOX-150-3FLEXR80	M8404D	Include kit MYeBOX-150 (M84023) + 3 FLEX-R80
MYeBOX-1500-3FLEXR80	M8405D	Include kit MYeBOX-1500 (M84033) + 3 FLEX-R80
MYeBOX-150-4FLEXR80	M8404E	Include kit MYeBOX-150 (M84023) + 4 FLEX-R80
MYeBOX-1500-4FLEXR80	M8405E	Include kit MYeBOX-1500 (M84033) + 4 FLEX-R80
MYeBOX 150-3CPG100	M84043	Include kit MYeBOX-150 (M84023) + 3 CPG 100
MYeBOX 1500-3CPG100	M84053	Include kit MYeBOX-1500 (M84033) + 3 CPG 100
MYeBOX 150-3CPRG500	M84045	Include kit MYeBOX-150 (M84023) + 3 CPRG 500
MYeBOX 1500 3CPRG500	M84055	Include kit MYeBOX-1500 (M84033) + 3 CPRG 500

\* Available in other lengths and with 4 clamps. Kits available with CPRG-1000, CPG-200/2000 clamps.

### References CLASS A

Type	Code	Voltage / Current inputs	Comms.	Transistor inputs / outputs
kit MYeBOX-150	M840230000A00	4 / 4	WiFi	- / -
kit MYeBOX-1500	M840330000A00	5 / 5	WiFi + 3G	2 / 2

Analysers with built-in SD memory and Cloud Calibration Certificate (IEC 61000-4-30 Ed.2) Class A. Includes voltage cables, alligator clips, USB cable, fastening strap, magnetic support, battery, power supply and carrying bag.

Type	Code	Description
MYeBOX-150-3FLEX45	M8404B0000A00	Include kit MYeBOX-150 (M84023) + 3 FLEX-R45
MYeBOX 1500-3FLEX45	M8405B0000A00	Include kit MYeBOX-1500 (M84033) + 3 FLEX-R45
MYeBOX-150-4FLEXR45	M8404C0000A00	Include kit MYeBOX-150 (M84023) + 4 FLEX-R45
MYeBOX-1500-4FLEXR45	M8405C0000A00	Include kit MYeBOX-1500 (M84033) + 4 FLEX-R45
MYeBOX-150-3FLEXR80	M8404D0000A00	Include kit MYeBOX-150 (M84023) + 3 FLEX-R80
MYeBOX-1500-3FLEXR80	M8405D0000A00	Include kit MYeBOX-1500 (M84033) + 3 FLEX-R80
MYeBOX-150-4FLEXR80	M8404E0000A00	Include kit MYeBOX-150 (M84023) + 4 FLEX-R80
MYeBOX-1500-4FLEXR80	M8405E0000A00	Include kit MYeBOX-1500 (M84033) + 4 FLEX-R80
MYeBOX 150-3CPG100	M840430000A00	Include kit MYeBOX-150 (M84023) + 3 CPG 100
MYeBOX 1500-3CPG100	M840530000A00	Include kit MYeBOX-1500 (M84033) + 3 CPG 100
MYeBOX 150-3CPRG500	M840450000A00	Include kit MYeBOX-150 (M84023) + 3 CPRG 500
MYeBOX 1500 3CPRG500	M840550000A00	Include kit MYeBOX-1500 (M84033) + 3 CPRG 500

\* Available in other lengths and with 4 clamps. Kits available with CPRG-1000, CPG-200/2000 clamps.

# MYeBOX

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### References CPG, rigid clamps

Type	$I_{min}$ - Measurement Range	No. Sensors	Code	No. Sensors	Code	No. Sensors	Code
CPG-5	0,05 / 0,5...5 A	1	M810B1	3	M810C1	4	M810D1
CPG-100	1 / 10...100 A	1	M810B2	3	M810C2	4	M810D2
CPRG-500	1 / 50...500 A	1	M810B3	3	M810C3	4	M810D3
CPRG-1000	1 / 20...1000 A	1	M810B4	3	M810C4	4	M810D4
CPG-2000/200	1 / 10...200 A - 10 / 150...2000 A	1	M810B5	3	M810C5	4	M810D5

### References CFG, residual current clamps

Type	Code	Measurement Range	$I_{min}$
CFG-5	M810BD	0,1...5 A	0,01 A
CFG-10	M810BE	0,1...10 A	0,05 A

### References FLEX-R, flexible clamps

Type	$I_{min}$ - Measurement Range	Length	No. Sensors	Code	No. Sensors	Code	No. Sensors	Code
FLEX-R45	1 / 10 / 50 - 10...100 /	45 cm	1	M81611	3	M81631	4	M81641
FLEX-R80	100...1000 / 1000...10000 A	80 cm	1	M81612	3	M81632	4	M81642
FLEX-R120		120 cm	1	M81613	3	M81633	4	M81643

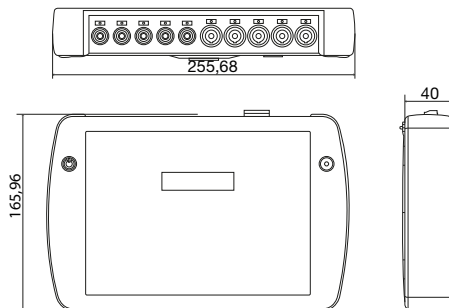
### Referencias FLEX-RMG, Sensores de corriente flexibles

Type	$I_{min}$ - Measurement Range	Length	No. Sensors	Code	No. Sensors	Code	No. Sensors	Code
FLEX-RMG70	1 / 10 / 50 - 10...100 /	22 cm	1	M81911	3	M81931	4	M81941
FLEX-RMG120	100...1000 / 1000...10000 A	38 cm	1	M81912	3	M81932	4	M81942

### Accesorios

Type	Code	Description
MYeBOX	M84011	MYeBOX battery
POWER SUPPLY MYeBOX	M84012	MYeBOX power cable
480V PSU ADAPTER MYeBOX	M8401A	MYeBOX power adapter for 480 Vac
MARKER MYeBOX 9 COLOURS	M84014	Markers
MYeBOX-CARRYING BAG	M84015	Carrying bag
MYeBOX Belt	M84016	MYeBOX strap
MYeBOX Mag. Support	M84017	MYeBOX magnetic base
MAV-7x4	M8990E	4 x Voltage magnetic adapter 7 x 10 mm

### Dimensions



### Connections

