

# **PLUS PRIMARY BATTERIES POWER BOX**



#### **TECHNICAL SPECIFICATIONS**

## REFERENCE

PA123791201

POWER SUPPLY	
Battery type	3 x alkaline/lithium/Ni-MH AA batteries (See "Batteries" table)
Battery voltage	1,5 VDC (per battery) (See "Batteries" table)
Power In (External Power)	5 to 24 VDC

POWER OUT	
Output power	$5,4  \text{VDC} \pm 5\%$ [1]
PV (Power voltage battery status)	3,0 to 5,0 VDC <sup>(2)</sup>

OPERATING ENVIRONMENT	
Ambient temperature range	-30°C to 80°C
Relative humidity	≤ 95% (non-condensing)

HOUSING	
Dimensions	120 x 90 x 50 mm
Weight	314 g
Material	ASA+PC-FR (UL 94 V-0) / Polycarbonate
Protection index	IP65

DS\_PLUS\_PRIM\_BAT\_PW\_BOX\_E01B



#### **CERTIFICATIONS AND APPROVALS**

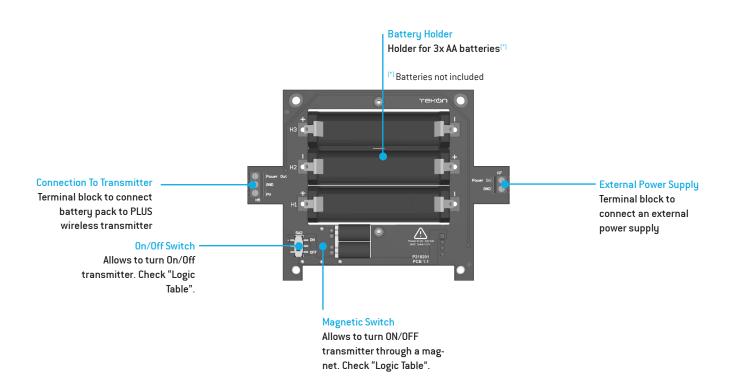
EMC Directive 2014/30/EU

EN 61326-1

## 2011/65/EU - July 1, 2011

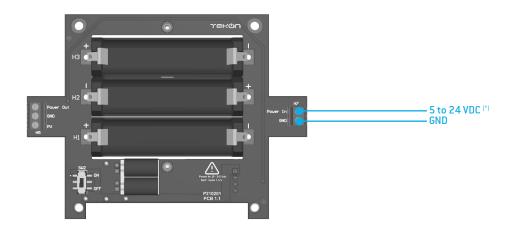
- (1) When powered by batteries. Output voltage is equal to power in voltage when powered by an external power supply.
- [2] If battery voltage is lower than 3,0 V DC, consider to replace the batteries.

#### **DESCRIPTION**



## **WIRING DIAGRAM**

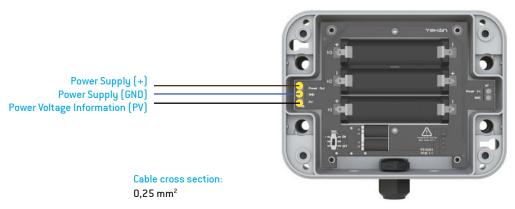
## **External Power Supply**



<sup>&</sup>lt;sup>(\*)</sup> External power can work simultaneously with primary batteries. Batteries works as a backup power when external voltage is equal or higher than 5,5 V. Cross section of connector: 0,205 to 1,31 mm<sup>2</sup>.



#### Connection to Device



Note: If "PV" connection is in use, PLUS wireless transmitter will send battery voltage to gateway, otherwise the transmitter will provide "Power Out" voltage.

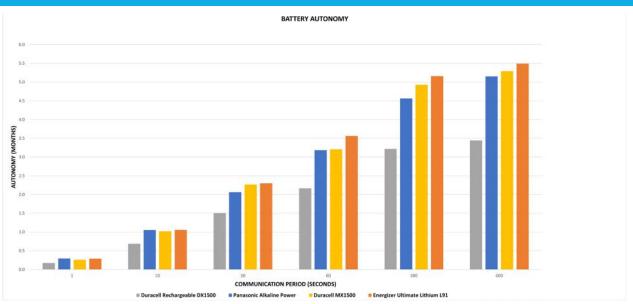
TERMINAL BLOCK	DESCRIPTION
Power Out	Regulated power output voltage
GND	Ground connection
PV	Power voltage to monitor battery voltage

#### \_\_\_\_\_

**BATTERIES** 

RECOMMENDED BATTERIES (*)				
BRAND	ENERGIZER	PANASONIC	DURACELL	DURACELL
Model	Ultimate Lithium L91	Alkaline Power	MN1500	DX1500H
TME Part Number	BAT-FR6/EGL-B4	BAT-LR06/P-B4	BAT-LR6/DR-B12	ACCU-R6/2500/DR
Classification	Lithium	Alkaline	Alkaline	Rechargeable
Chemical System	Li/FeS <sub>2</sub>	Zn/Mn0 <sub>2</sub>	Zn/Mn0 <sub>2</sub>	NiMH
Nominal Voltage	1,5 V	1,5 V	1,5 V	1,2 V
Туре	AA	AA	AA	AA
Operating Temperature	-40°C to 60°C	-20°C to 54°C	-20°C to 54°C	-10°C to 50°C

#### PERFORMANCE TESTS



<sup>&</sup>lt;sup>(\*)</sup>Tests performed with PLUS TWP-xUT transmitter at ambient temperature (23°C).

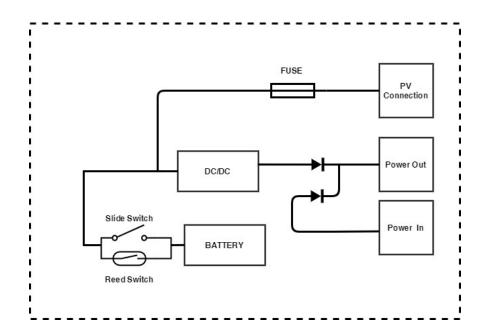


## **SWITCH**

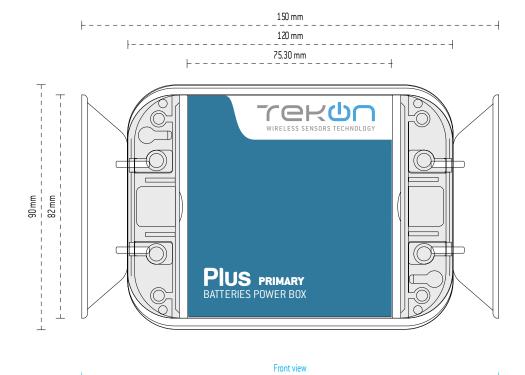
## LOGIC TABLE

REED SWITCH	ON / OFF SWITCH	POWER OUT
0n	0n	On
0n	Off	On
Off	0n	On
Off	Off	Off

#### BLOCK DIAGRAM

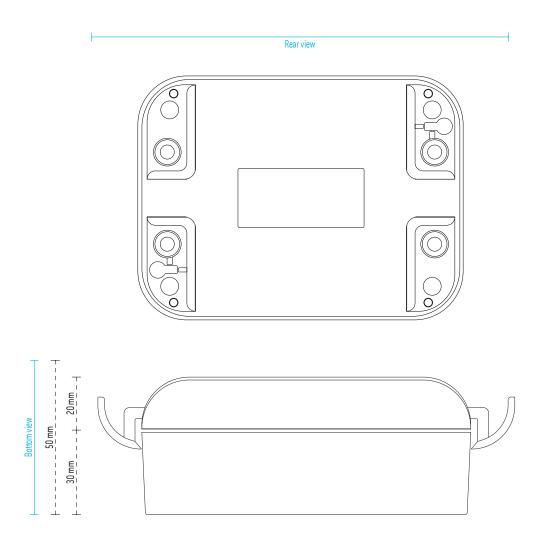


# TECHNICAL DRAWINGS



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REVISION HISTORY	
VERSION	
E01B	Update of battery autonomy chart.

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