SW-DIGI-BUS
ANPASSMODUL
www.sw-digi-bus.com

ANPASSMODUL SW-DIGI-BUS

APPLICATION

Controlling the brightness of a large number of lamps at long distances.
The receiver of the SW-DIGI-BUS system serving the role of an interface between SW-DIGI-BUS and a dimmable power supply of a lighting fitting.

BENEFITS

- A compact and inexpensive device.
- To be installed directly in fittings or in a terminal box.

SPECIFICATION

- Direct power supply from the SW-DIGI-BUS signal.
- Different options of the receiver for various dimmable power supply units available on the market. (PWM, analogue type 1,10V, DALI, DSI)
- Adjusting the linear characteristics of SW-DIGI-BUS to the characteristics of the dimmable power supply unit
- Infinitely variable brightness adjustment. Dimming time configured by the control unit.
- Group controlling. The receivers can be addressed and then parameterized by the control unit. It is possible to define areas where the light never exceeds a certain level. (e.g.. pedestrian crossings, intersections etc.)

OCCUPATIONAL SAFETY

The system has been developed for controlling the lighting in tunnels, on streets, squares, and halls, where safe lighting is of high importance.

- The system's proper operation does not require any amplifiers and transmitters. The controlling units may be placed at the power supply points.
- A damaged lighting device does not affect the correct operation of the others. Blocking the SW-DIGI-BUS signal is impossible.
- When the receiver has no connection with the control unit for some time, the maximum brightness will be set.
- If the control unit or the control cable of SW-DIGI-BUS is damaged, maximum brightness will also be set.

GENERAL SPECIFICATION

Technical specification	minimum	typical	maximum
Power supply voltage range SW-DIGI-BUS	200VAC	230 VAC	240VAC
Power supply frequency SW-DIGI-BUS	49,5 Hz	50 Hz	50,5Hz
Power supply current SW-DIGI-BUS		12 mA	
Current at L2 and N2 terminals			1 A
Power consumption		1,5 W	
The length of the cables between Anpassmodul and the power supply unit			1,5 m
Adjustment range	1 %		100%
Regulation range resolution (linear)		0,5%	
Temperature range	- 20°C		+70°C
Casing	Metal (stainless steel)		
Length X width.10 height.	122 x 30,5 x 30		
Protection degree	IP20		
Weight	160g		
Electronic circuit	Material: FR4 2-layer (resistant to vibrations) Varnished printed board		
Clamps	WAGO 257 Serie 0,08 – 2,5 mm^2 (a cord or wire)		
Insulation	EN61558-2-6		
Standards	EN55015, EN61547		

TECHNICAL SPECIFICATION: AP_PWM (PWM VERSION)

Technical specification	minimum	typical	maximum
PWM frequency		312 Hz	
Temperature stability		0,1%	
Number of controlled power supply units	1		4
Behaviour at error	• No SW-DIGI-BUS communication → 100% brightness • No SW-DIGI-BUS phase → 100% brightness		

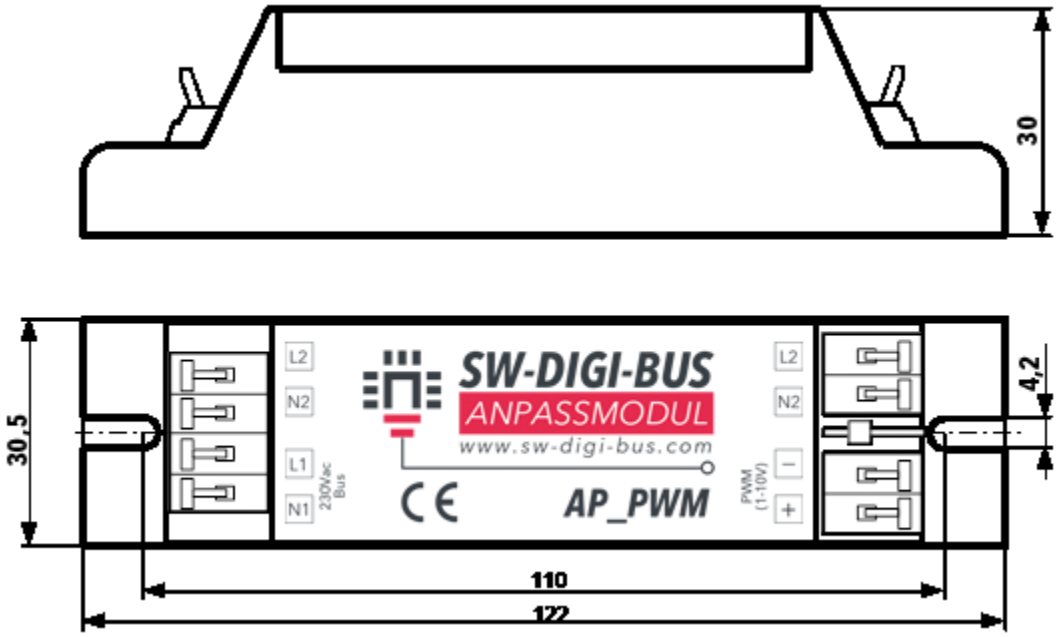
TECHNICAL SPECIFICATION: AP_10V (1..10V VERSION)

Technical specification	minimum	typical	maximum
Temperature stability		2%	
Number of controlled power supply units	1		4
Behaviour at error	No SW-DIGI-BUS communication → 100% brightness No SW-DIGI-BUS phase → 100% brightness		

TECHNICAL SPECIFICATION: AP_DALI, AP_DSI (DSI AND DALI VERSION)

Technical specification	minimum	typical	maximum
DSI-Bus power supply	9 V		11 V
Temperature stability		0,1% (fully digital)	
Number of controlled power supply units	1		4
Power supply unit control	The linear characteristics of SW-DIGI-BUS with a resolution of 0.5% is adapted to the logarithmic characteristics of DSI and DALI devices		
Behaviour at error	• No SW-DIGI-BUS phase → 100% brightness • No SW-DIGI-BUS phase → brightness dependent on the power supply unit		

CONNECTION DIAGRAM



ORDER CODES

No.	Order codes	Description
1	AP_PWM_C2	Anpassmodul PWM Hardware C / Software 3.00
2	AP_10V_B0	Anpassmodul analog 0..10V Hardware B / Software 1.00
3	AP_DALI_B0	Anpassmodul DALI Hardware B / Software 1.00
4	AP_DSI_B0	Anpassmodul DSI Hardware B / Software 1.00

At the request, the device is also available in hermetic tubular sealing which allows for assembly directly in the hoist, cable channel or connecting pipe, as well as it enables easy integration of the module into the connecting cable.