



PassivePAQ-L-1F20-SAB-1.3K-840-3-MZ
I_{max} 350mA U_{max} 22V T_c 85°C V1.0
5119000037 BIN SL-AZ Made in Estonia



PassivePAQ Linear for Daisy Mini DATASHEET



PassivePAQ Linear 1 ft. for DAISY MINI optics

PassivePAQ Linear 2 ft. for DAISY MINI optics

PRODUCT DESCRIPTION

DA-Group's PassivePAQ linear for LEDiL® DAISY MINI optics offers a compact solution for various applications and needs when using LEDiL® DAISY MINI optics. These PassivePAQ boards support multiple different lengths of luminaires and enable a wide selection of lumen output packages. These boards also support two channel tunable white operation and double lumen package option when all LEDs are with same CCT and channels have been combined on the board. These boards offer premium class office lighting in a compact and affordable package with low UGR when combined with LEDiL® DAISY MINI optics.

5 YEARS LIMITED WARRANTY

DA-Group takes pride in the quality of its products. We not only develop all products in house, they are also produced in our own manufacturing plants to ensure guaranteed reliability and performance. DA-Group's PassivePAQ modules come with the assurance of 5 years warranty. For details and conditions please refer to our warranty policy.

CERTIFICATES AND STANDARDS



KEY FEATURES

- Optimized for LEDiL® DAISY MINI linear optics
- Best in class 2835 or 3030 LEDs
- Beam angle of 120°
- Excellent Light Uniformity
- Efficacy up to 225 lm/W
- Small colour tolerance (SDCM < 3)
- Various CCT's available 2200K, 2700K, 3000K, 4000K, 5000K, 5700K, 6500K
- CRI 80, CRI 90 available upon request
- Single / Dual channel / Double output
- Tunable White 2700K-6500K
- > 1 W / mK PCB laminate for optimal thermal performance
- Enables 4 ft. luminaires with SELV voltage < 60 V and > 8000 lumen light output with optics
- Simple installation of optics and module with M3 screws
- TM-21-11 L70 lifetime > 72 000 h @ Tc max +85 °

TECHNICAL DATA *

Parameter	Unit	PassivePAQ Linear 1 ft. 1 x LM301B	PassivePAQ Linear 2 ft. 1 x LM301B	PassivePAQ Linear 1 ft. 2 x LM281B+	PassivePAQ Linear 2 ft. 2 x LM281B+
Dimensions	mm	279 x 20	559 x 20	279 x 20	559 x 20
CRI		> 80	> 80	> 80	> 80
CCT	K	4.000	4.000	4.000	4.000
Standard deviation of color matching	Mac-Adam SDCM	< 3	< 3	< 3	< 3
Max current per channel	mA	350	700	700	1400
Nominal voltage	V	19,5	19,5	21	21
Max lumen output	lm	1300 ± 5%	2600 ± 5%	2200 ± 5%	4400 ± 5%
Efficacy	lm/W	196	196	149	149
Beam angle	deg	120	120	120	120
LED type		Samsung LM301B	Samsung LM301B	Samsung LM281B+	Samsung LM281B+
Max No. of LEDs / module		14	28	28	56
Connector type		BJB NANO 46.141.1001	BJB NANO 46.141.1001	BJB NANO 46.141.1001	BJB NANO 46.141.1001
PCB Material		CEM-3 HT	CEM-3 HT	CEM-3 HT	CEM-3 HT
Solder mask color		White	White	White	White
Backside PCB copper plated		No	No	No	No
Tc Max	°C	85	85	85	85
Conformity		CE / ROHS	CE / ROHS	CE / ROHS	CE / ROHS
Uopen	V	430	430	430	430
Uopen between channels for TW board	V	N/A	N/A	150	150

*Typical values @ Tc 55°C

PassivePAQ Linear 1 ft. 1 x LM301B *

		High Efficiency mode		Normal mode	
Drive current	mA	175		350	
	CCT	3000 K	4000 K	3000 K	4000 K
Luminous flux	lm	650	700	1250	1300
Efficacy	lm/W	202	213	186	196
Forward voltage (Vf) **	V	17,8 – 20,5	17,8 – 20,5	18,5 – 21,2	18,5 – 21,2
Power consumption	W	3,3	3,3	6,8	6,8

* Typical values @ Tc +55°C

** Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +85°C

PassivePAQ Linear 2 ft. 1 x LM301B *

		High Efficiency mode		Normal mode	
Drive current	mA	350		700	
	CCT	3000 K	4000 K	3000 K	4000 K
Luminous flux per channel	lm	1300	1400	2500	2600
Efficacy	lm/W	202	213	186	196
Forward voltage (Vf) **	V	17,8 – 20,5	17,8 – 20,5	18,5 – 21,2	18,5 – 21,2
Power consumption	W	6,6	6,6	13,6	13,6

* Typical values @ Tc +55°C

** Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +85°C

PassivePAQ Linear 1 ft. 2 x LM281B+ *

		High Efficiency mode			Normal mode		
Drive current	mA	350	175 / ch.	175 / ch.	700	350 / ch.	350 / ch.
	CCT	4000 K	2700 K	6500 K	4000 K	2700 K	6500 K
Luminous flux per channel	lm	1200	550	600	2200	1000	1100
Efficacy	lm/W	173	159	173	149	138	149
Forward voltage (Vf) per channel **	V	19 – 21,4	19 – 21,4	19 – 21,4	20,2 – 22,5	20,2 – 22,5	20,2 – 22,5
Power consumption per channel	W	7	3,5	3,5	14,8	7,4	7,4

* Typical values @ Tc +55°C

** Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +85°C

PassivePAQ Linear 2 ft. 2 x LM281B+ *

		High Efficiency mode			Normal mode		
Drive current	mA	700	350 / ch.	350 / ch.	1400	700 / ch.	700 / ch.
	CCT	4000 K	2700 K	6500 K	4000 K	2700 K	6500 K
Luminous flux per channel	lm	2400	1100	1200	4400	2000	2200
Efficacy	lm/W	173	159	173	149	138	149
Forward voltage (Vf) per channel **	V	19 – 21,4	19 – 21,4	19 – 21,4	20,2 – 22,5	20,2 – 22,5	20,2 – 22,5
Power consumption per channel	W	14	7	7	29,6	14,8	14,8

* Typical values @ Tc +55°C

** Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +85°C

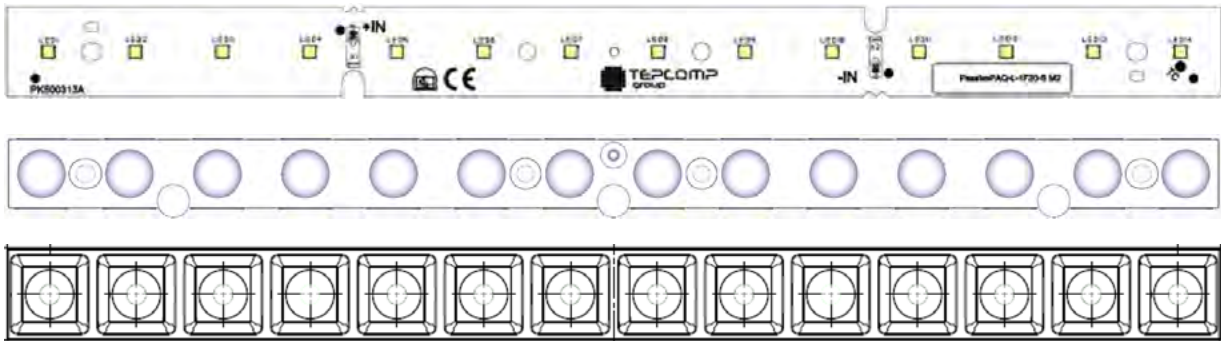
ORDERING DATA

Product description	Ordering code
PassivePAQ Linear 1 ft. for DAISY MINI, 1 x LM301B 4000K, CRI80, SDCM3	VP500313
PassivePAQ Linear 2 ft. for DAISY MINI, 1 x LM301B 4000K, CRI80, SDCM3	VP500xxx
PassivePAQ Linear 1 ft. for DAISY MINI, 2 x LM281B+ 4000K, CRI80, SDCM3	VP500xxx
PassivePAQ Linear 2 ft. for DAISY MINI, 2 x LM281B+ 4000K, CRI80, SDCM3	VP500xxx
PassivePAQ Linear 1 ft. for DAISY MINI, LM281B+, Tunable White 2700K & 6500K, CRI80, SDCM3	VP500314
PassivePAQ Linear 2 ft. for DAISY MINI, LM281B+, Tunable White 2700K & 6500K, CRI80, SDCM3	VP500xxx

Please contact DA-Group sales for other configurations of these boards. These boards can be mounted with Samsung's LM301B or LM281B+ LEDs (depending on the board type) with all available CCT's, CRI's and SDCM performance and not all possible combinations are listed above.

MECHANICAL ILLUSTRATIONS AND OPTICS COMBINATION EXAMPLES

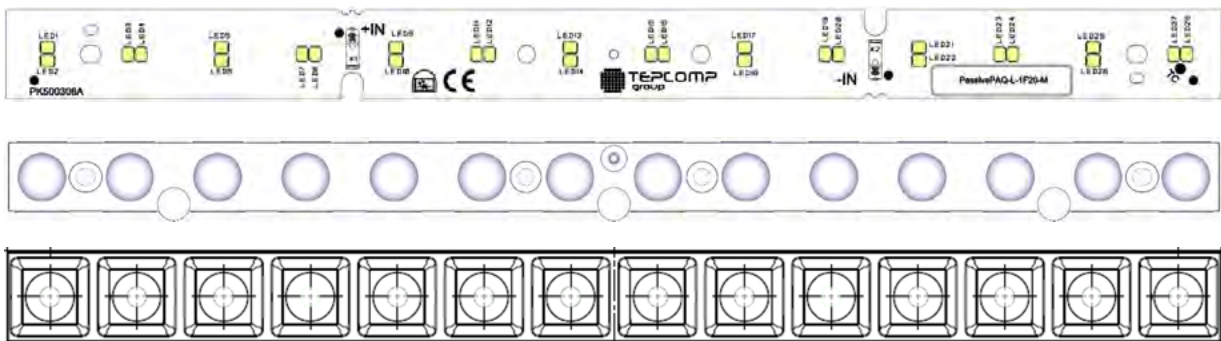
PassivePAQ Linear 1 ft. for DAISY MINI optics, 1 x LM301B



5 pcs of above shown combinations of PassivePAQ Linear 1 ft. for DAISY MINI 1 x LM301B and LEDiL® DAISY MINI lenses and shades connected in series, would produce a 5 feet long luminaire with total lumen output of > 5400 lumens (assuming ~15 % optics loss) when using PassivePAQ LED boards with 4000K CRI80 LEDs and 350 mA drive current.

Please visit DA-Group web pages to download 2D DXF and 3D step files of the PassivePAQ Linear DAISY MINI LED boards.

PassivePAQ Linear 1 ft. for DAISY MINI optics, 2 x LM281B+

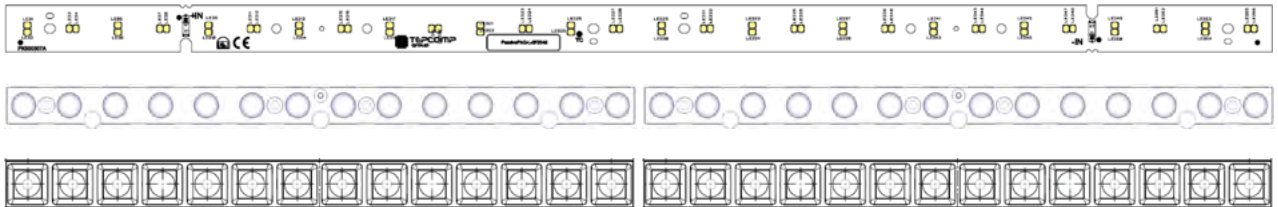


5 pcs of above shown combinations of PassivePAQ Linear 1 ft. for DAISY MINI 2 x LM281B+ and LEDiL® DAISY MINI lenses and shades connected in series, would produce a 5 feet long luminaire with total lumen output of > 9200 lumens (assuming ~15 % optics loss) when using PassivePAQ LED boards with 4000K CRI80 LEDs and 700 mA drive current.

Please visit DA-Group web pages to download 2D DXF and 3D step files of the PassivePAQ Linear DAISY MINI LED boards.

MECHANICAL ILLUSTRATIONS AND OPTICS COMBINATION EXAMPLES

PassivePAQ Linear 2 ft. for DAISY MINI optics, 2 x LM281B+

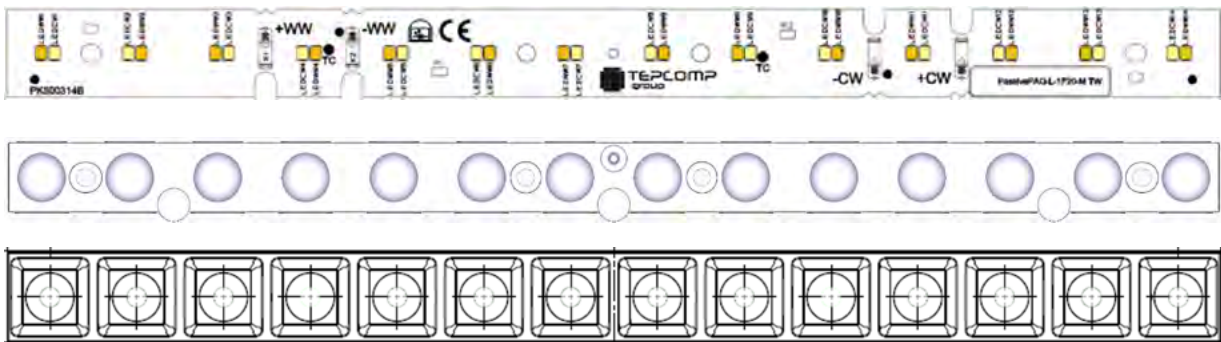


2 pcs of above shown combinations of PassivePAQ Linear 2 ft. for DAISY MINI 2 x LM281B+ and LEDiL® DAISY MINI lenses and shades connected in series, would produce a 4 feet long luminaire with total lumen output of > 7300 lumens (assuming ~15 % optics loss) when using when using PassivePAQ LED boards with 4000K CRI80 LEDs and 1400 mA drive current.

Note that 1 ft. and 2 ft. PassivePAQ Linear for DAISY MINI boards should not be mixed into the same luminaire so that different length LED boards are electrically connected together. This is due to the 1 ft. and 2 ft. boards requiring a different drive current, due to different electrical connections of the LEDs.

Please visit DA-Group web pages to download 2D DXF and 3D step files of the PassivePAQ Linear DAISY MINI LED boards.

PassivePAQ Linear 1 ft. for DAISY MINI optics, LM281B+ Tunable White 2700K & 6500K



4 pcs of above shown combinations of PassivePAQ Linear 1 ft. for DAISY MINI with 2700K & 6500K LM281B+ LEDs and LEDiL® DAISY MINI lenses and shades connected in series, would produce a 4 feet long tunable white luminaire with lumen output of > 3300 lumens (assuming ~15 % optics loss) from warm white channel and > 3600 lumens (assuming 15 % optics loss) from cold white channel when using 350 mA drive current per channel.

Please visit DA-Group web pages to download 2D DXF and 3D step files of the PassivePAQ Linear DAISY MINI LED boards.

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