A close-up photograph of a white printed circuit board (PCB) populated with several yellow LEDs. The board is populated with various components, including a ribbon cable connector, a small integrated circuit, and several surface-mount components. The text 'TEPCOMP group' is printed on the board, along with labels 'TC' and 'NTC' near specific components. The board is shown at an angle, highlighting its layout and components.

PassivePAQ HighPower for  
Strada and High Bay IP 2x6  
DATASHEET

## PassivePAQ HighPower for Strada and High Bay IP 2x6

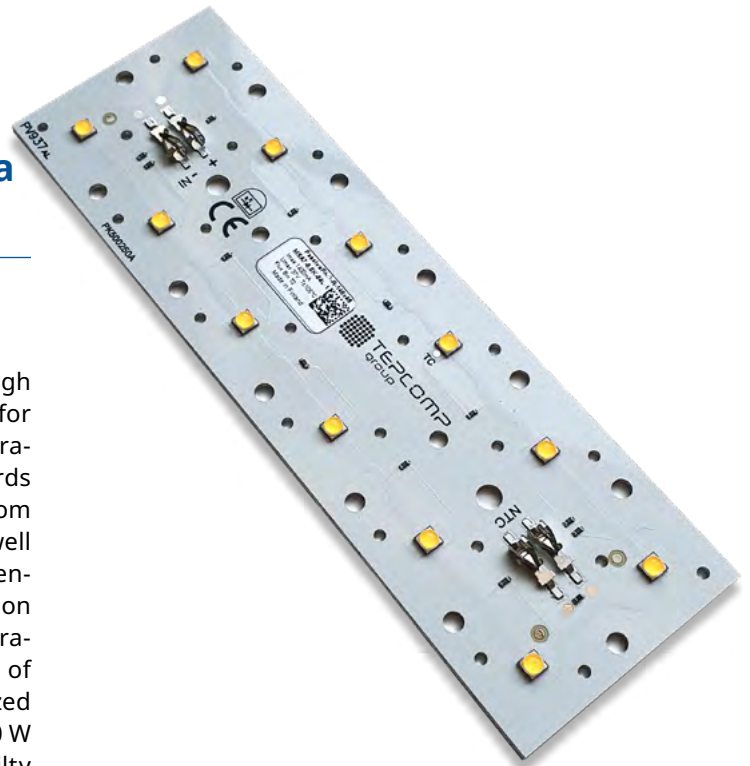
### PRODUCT DESCRIPTION

DA-Group's PassivePAQ HighPower for Strada\* and High Bay IP 2x6 LEDiL® optics offers a flexible solution for various applications and needs when using LEDiL® Strada\* or High Bay IP 2x6 optics. These PassivePAQ boards support multiple different 3535 high power LEDs from Samsung, Cree and Lumileds. These boards are also well suited for horticulture applications since above mentioned LED manufacturers are offering a wide selection of LEDs with different wavelength light and LEDiL® Strada\* or High Bay IP 2x6 optics offers a wide selection of light patterns. Additionally, these boards are optimized to be used with DA-Group's PowerPAQ 540 W and 300 W high power LED drivers which are superior in flexibility with wide range of software configurable features and offer a superb flicker performance. Contact DA-Group's sales to discuss these various options in more details since this datasheet only presents three example options with Samsung LH351 LEDs.

### 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® Strada IP and High Bay 2x6 optics
- Best in class 3535 LEDs
- Efficacy up to 170 lm/W
- Small colour tolerance (SDCM < 3)
- Various CCT's and single color wavelengths available
- CRI 90, CRI 80 and CRI 70 variants available
- > 2 W / mK metal core PCB laminate for optimal thermal performance
- Uin maximum 430V (creepage).
- Simple installation of optics and module with M3 screws
- DA-Group's PowerPAQ 540 W and 300 W compatible
- Built-in NTC for thermal protection with driver

\*Excluding STRADA-IP-2X6-DWC, STRADA-IP-2X6-DWC-90, STRADA-IP-2X6-DWC and STRADA-IP-2X6-DWC-90-PC optics

## TECHNICAL DATA \*

Parameter	Unit	PassivePAQ HighPower LH351B	PassivePAQ HighPower LH351D	PassivePAQ High-Power LH351H
<b>Dimensions</b>	mm	146 x 46 x 1,6	146 x 46 x 1,6	146 x 46 x 1,6
<b>CRI</b>		> 80	> 80	N/A
<b>CCT</b>	K	4.000	4.000	N/A
<b>Peak wavelenght</b>	nm	N/A	N/A	450 / 660
<b>Standard deviation of color matching</b>	MacAdam SDCM	< 3.5	< 3.5	N/A
<b>Max drive current</b>	mA	1400	2100	1000
<b>Nominal voltage</b>	V	36,5	35,5	28,5
<b>Lumen output @1400 mA</b>	lm	5750 ± 10%	6500 ± 7%	N/A
<b>Lumen efficacy @1400 mA</b>	lm/W	113	130	N/A
<b>PPF @700 mA</b>	umol/s	N/A	N/A	54,4 (9,7 / 44,7)
<b>PPF / W @700 mA</b>	umol/J	N/A	N/A	2,9
<b>Beam angle</b>	deg	120	128	130
<b>LED type</b>		Samsung LH351B	Samsung LH351D	Samsung LH351H
<b>No. of LEDs / module</b>		12	12	2+10
<b>Connector type</b>		AVX 70-9296	AVX 70-9296	AVX 70-9296
<b>PCB Material</b>		MCPCB	MCPCB	MCPCB
<b>Solder mask color</b>		White	White	White
<b>Tc Max</b>	°C	105	105	105
<b>Conformity</b>		CE / ROHS	CE / ROHS	CE / ROHS
<b>Uopen</b>	V	430	430	430
<b>On board NTC type</b>		NCP18XV103J03RB	NCP18XV103J03RB	NCP18XV103J03RB

\*Typical values @ Tc 85°C

**PassivePAQ HighPower  
LH351B\***

		High Efficiency mode	Mid flux mode	Maximum mode
Drive current	mA	350	700	1400
Color temperature (CCT)	K	<b>4000</b>	<b>4000</b>	<b>4000</b>
Luminous flux	lm	1850	3350	5750
Efficacy	lm/W	163	142	113
Forward voltage (Vf) **	V	28,3 – 39,3	29,7 – 41,3	32 – 44,6
Power consumption	W	12	24	51

\* Typical values @ Tc +85°C

\*\* Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +105°C

**PassivePAQ HighPower  
LH351D\***

		High Efficiency mode	Mid flux mode	Maximum mode
Drive current	mA	350	700	2100
Color temperature (CCT)	K	<b>4000</b>	<b>4000</b>	<b>4000</b>
Luminous flux	lm	1900	3550	8900
Efficacy	lm/W	165	152	114
Forward voltage (Vf) **	V	28,9 – 37,5	29,9 – 38,8	33,2 – 43,0
Power consumption	W	12	24	79

\* Typical values @ Tc +85°C

\*\* Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +105°C

**PassivePAQ HighPower  
LH351H\***

		High Efficiency mode	Mid flux mode	Maximum mode
Drive current	mA	350	700	1000
Color temperature	nm	<b>450 / 660</b>	<b>450 / 660</b>	<b>450 / 660</b>
PPF	umol/s	27,6	54,4	76,0
PPF / W	umol/J	3,3	2,9	2,7
Forward voltage (Vf) **	V	22,0 – 31,9	24,2 – 35,2	25,9 – 37,6
Power consumption	W	8,5	18,7	28,5

\* Typical values @ Tc +85°C

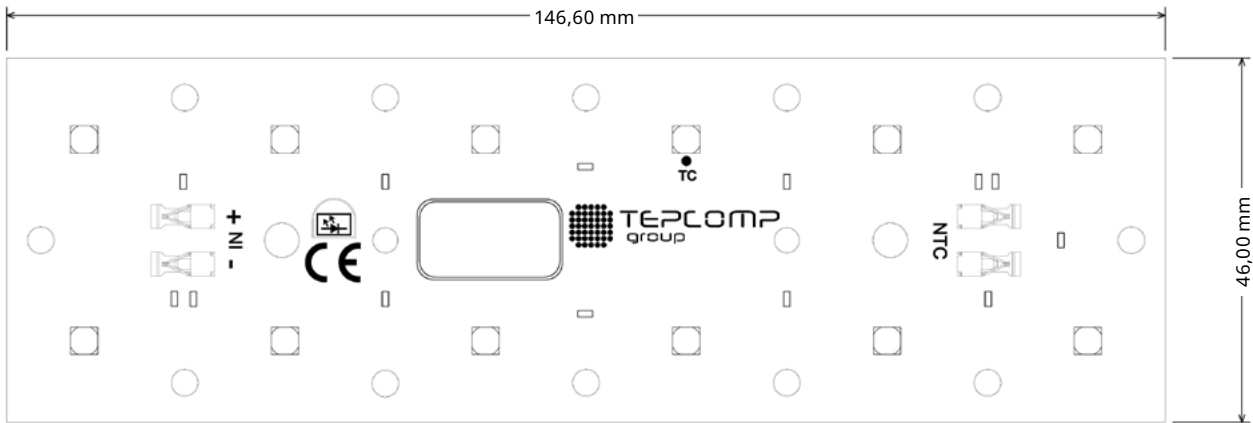
\*\* Absolute max voltage, calculated at Tc -40°C and absolute min voltage, calculated at Tc +105°C

## ORDERING DATA

Product description	Ordering code
PassivePAQ HighPower for Strada and High Bay IP 2x6, LH351B 4000K CRI80	VP500XXX
PassivePAQ HighPower for Strada and High Bay IP 2x6, LH351D 4000K CRI80	VP500XXX
PassivePAQ HighPower for Strada and High Bay IP 2x6, LH351H 450nm/660nm	VP500XXX

Please contact DA-Group sales for other configurations of this LED- board. This board can be mounted with several different 3535 high power LEDs from Samsung, Cree and Lumileds and not all possible combinations are listed above.

## PASSIVEPAQ HIGHPOWER FOR STRADA AND HIGH BAY IP 2X6 MECHANICAL DIMENSIONS



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