



Datasheet

LED Retrofit Kit for Guidance Signs

General

Taxiway Guidance Signs (TGS) equipped with halogen lamps or fluorescent tubes are inefficient and consume a lot of power. With the LED Retrofit kit, your existing TGS can be upgraded to LED technology, reducing power consumption by up to 70% while creating a uniform light distribution. The signs could be upgraded to meet ICAO light distribution requirements. The retrofitted signs will have low power consumption with more than 50,000 hours lifetime of the LED modules when in full operation.

Key features

- Simple retrofit method requiring no more than 1 hour for each sign
- Each LED module array fitted with 5 high-performance LEDs with an expected lifetime of 50.000hrs
- All components resistant to corrosion
- Optional fail-open functionality

Description

The retrofit kit includes:

- A number of LED sign modules (IP68), each for 24VDC – 400mA
- The same number of aluminum plates with socket for the LED module (article number 40-6352)
- Internal and external connection cables
- An electronic driver with 6.6A or 230V supply

Configuration table

One LED module array will illuminate a sign surface area of 400mm wide and 600mm high. The amount of LED modules required per sign will depend upon its size (length, height and depth). Please refer to the below configuration tables to calculate the requirements per size of sign.

Configuration table

	Illumination width (per module)	Illumination height (per module)	Rel. illuminaton intensity	Number of modules
Distance to the frontplate	Opt. distance between the modules	Opt. distance between the modules		See configuration table
100	300	500	196 %	1
120	350	550	136 %	2
140	400	600	100 %	3
160	450	650	77 %	4
180	500	700	60 %	5

Table 1

Illuminated width x100		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Height of sign surface	Number of module rows	Number of modules per sign																								
400 – 500	single-row vertical	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10
> 500 – 600	two-rows horizontal	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8	10	10	10	10	10	12	12	12	12	12
> 600 – 1000	two-rows vertical	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	18	20	20	20
> 1000 – 1200	four-rows horizontal	-	8	8	8	8	12	12	12	12	12	16	16	16	16	16	20	20	20	20	20	24	24	24	24	24
> 1000 – 1500	three-rows vertical	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2

Illuminated width x100		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Height of sign surface	Number of module rows	Number of modules per sign																								
400 – 550	single-row vertical	2	2	3	3	3	4	4	4	4	5	5	5	6	6	6	6	7	7	7	8	8	8	8	9	9
> 550 – 700	two-rows horizontal	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8	8	10	10	10	10	10	12	12	12
> 700 – 1100	two-rows vertical	4	4	6	6	6	8	8	8	8	10	10	10	12	12	12	12	14	14	14	16	16	16	16	18	18
> 1100 -1400	four-rows horizontal	-	-	8	8	8	8	12	12	12	12	12	16	16	16	16	16	16	20	20	20	20	20	24	24	24
> 1100 -1650	three-rows vertical	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

Illuminated width x100		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Height of sign surface	Number of module rows	Number of modules per sign																								
400	single-row horizontal	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5
> 400 – 600	single-row vertical	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
> 600 – 800	two-rows horizontal	2	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8	8	10	10	10	10	10	10
> 800 – 1200	two-rows vertical	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16

Table 4

Illuminated width x100		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Height of sign surface	Number of module rows	Number of modules per sign																									
400 – 450	single-row horizontal	1	2	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5	5	5	
> 450 – 650	single-row vertical	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	
> 650 – 900	two-rows horizontal	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8	8	8	10	10	10	10	
> 900 – 1300	two-rows vertical	4	4	4	4	6	6	6	6	8	8	8	8	8	8	10	10	10	10	12	12	12	12	12	14	14	14

Table 5

Illuminated width x100		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Height of sign surface	Number of module rows	Number of modules per sign																									
400 – 500	single-row horizontal	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5	
> 500 – 700	single-row vertical	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	
> 400 – 1000	two-rows horizontal	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	6	8	8	8	8	8	8	8	10	10	
> 1000 – 1400	two-rows vertical	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8	10	10	10	10	10	10	12	12	12	12	12

Installation

The LED Retrofit Kit provides various mounting possibilities:

- Clip connection with 4 clips
- Screw connection with 4 bolts (default parts, not included in the delivery)

Several LED Retrofit Kits are connected with each other per plug connection in a parallel circuit.

- Maximum 6 LED modules can be connected on one 6.6A electronic driver FAA style 2
- Maximum 5 LED modules can be connected on one 6.6A electronic driver FAA style 3
- Maximum 10 LED modules can be connected on one 230V electronic driver

Document information

Name : 04_LED_Retrofit_Kit_For_Guidance_Signs_03-71054
Version : V2
Language : English (Original manual)

For the latest version of this document see <https://www.tkh-airportsolutions.com/airfield-products/> or scan:



Ordering code

Ordering code

Item	Article number	Minimum packaging size
LED-module	203.361-007	1 piece / box
LED-module	203.361-008	10 pieces / box
Internal cable group	203.362-007	1 piece / box
Internal cable group	203.362-008	10 pieces / box
External cable group	203.363-007	1 piece / box
External cable group	203.363-008	10 pieces / box
Electronic driver style 2	203.364-007	1 piece / box
Electronic driver style 2 with fail open	203.365-007	1 piece / box
Electronic driver style 3	203.364-017	1 piece / box
Electronic driver style 3 with fail open	203.365-017	1 piece / box
Electronic driver 230V	845250	1 piece / box

These articles can be ordered separately.

Please contact our sales department for further information.



Company profile:

TKH Airport Solutions offers innovation in airfield ground lighting. We provide a range of AGL products and solutions. Powerful, reliable LED lighting products and accessories as well as future-proof innovative solutions for airfield lighting. Being part of the TKH Group, today's innovative smart technology benefits from 90 years of experience in connectivity, energy distribution and AGL.

More information:

TKH Airport Solutions
sales@tkh-airportsolutions.com
www.tkh-airportsolutions.com
+31 (0)53 57 414 56

Visiting address:

Elektrostraat 17
7483 PG Haaksbergen
The Netherlands



member of the TKH Group <