



# **EIC® LED STREET & PUBLIC LIGHTING SOLUTIONS**

## **CATALOG** **(Swan Series)**

### **General Features and Applications**

EIC High Power LED Street Light is a new solution for traditional street illumination. Direct connection to 85~265VAC AC Power, the LED Street Light embodying state-of-the-art high power LED technology is a green “environmental friendly” product.

- Street light optics
- CITIZEN COB LED chips
- High Transmission glass lens with rectangular Beam
- Reduced excessive lighting and light pollution
- Higher efficacy, up to 90 lm/W, more energy and money saving
- Unique **HEAT ENGINE** technology,  $T_c \leq 45^\circ\text{C}$
- Durability, IP67 driver, IP66 full sealed housing
- Aero superior aluminum alloy body, super conductive Nano powder coating
- Longer lifespan  $\geq 50,000$ hrs, low maintenance
- RoHS compliant

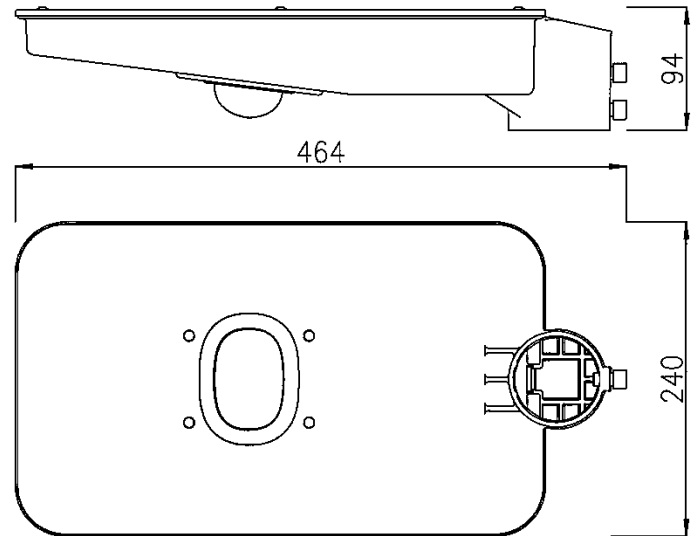
For road and area lighting: e.g. roads, streets, industrial parks/plant, packing lots, path, driveways and other outdoor public lighting

## Model: SC-LD04503 45W Swan Series

### Dimensions



### Drawing



### Technical Specifications

#### Model: SC-LD04503

- Light type: LED street/public lights
- Input Voltage: 100-240v AC
- Input Power: 45W\*
- Beam Angle: 70\*120/70\*140deg\*
- LED Source: CITIZEN COB LED
- Case Temperature: <math><45^{\circ}\text{C}</math> ( $T_a=25^{\circ}\text{C}</math>)$
- Working Temperature:  $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- Color Temperature (CCT): 3000/5000
- IP Rating: IP67 driver, IP66 whole lamp
- Life Span: 50,000 hrs
- Net weight: 4.5kg
- High quality, robust aluminum heat sink

Model	LEDs	Color	CCT (K)	Luminous Flux* (lm)	Light Efficacy* (lm/W)	Color Rendering Index* (CRI: Ra)
SC-LD04503	1	Warm white	3000	3825	85	80
	1	Neutral white	5000	4095	91	65-70

Note: \*  $\pm 10\%$  will be allowed

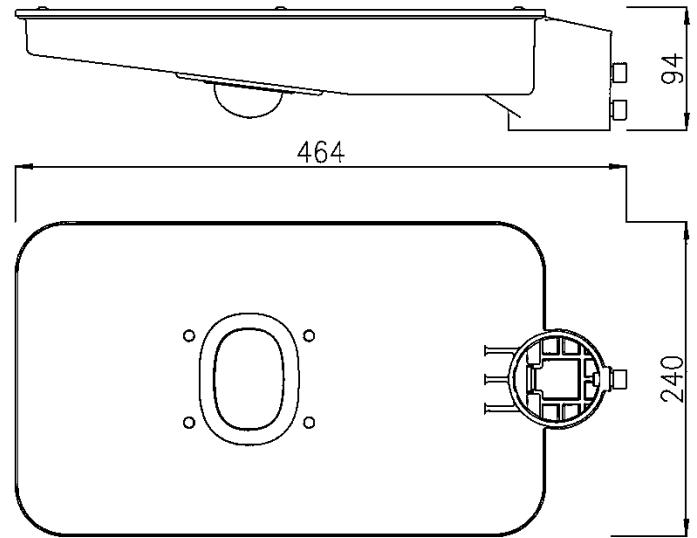
Light sensor can be added

## Model: SC-LD06503 65W Swan Series

### Dimensions



### Drawing



### Technical Specifications

#### Model: SC-LD06503

- Light type: LED street/public lights
- Input Voltage: 100-240v AC
- Input Power: 65W\*
- Beam Angle: 70\*120/70\*140deg\*
- LED Source: CITIZEN COB LED
- Case Temperature: <math><45^{\circ}\text{C}</math> ( $T_a=25^{\circ}\text{C}</math>)$
- Working Temperature:  $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- Color Temperature (CCT): 3000/5000
- IP Rating: IP67 driver, IP66 whole lamp
- Life Span: 50,000 hrs
- Net weight: 4.5kg
- High quality, robust aluminum heat sink

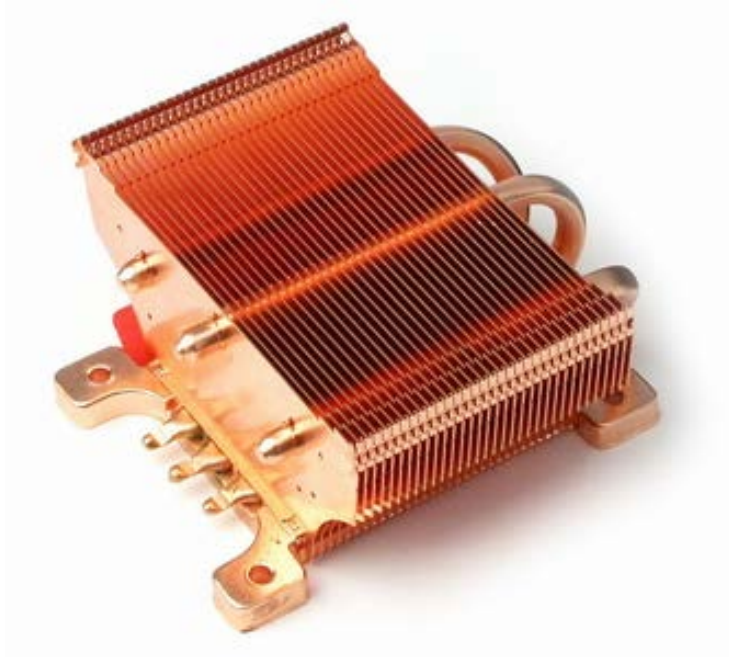
Model	LEDs	Color	CCT (K)	Luminous Flux* (lm)	Light Efficacy* (lm/W)	Color Rendering Index* (CRI: Ra)
SC-LD06503	1	Warm white	3000	5525	85	80
	1	Neutral white	5000	5915	91	65-70

Note: \*  $\pm 10\%$  will be allowed

Light sensor can be added

## Unique Features and Advantages

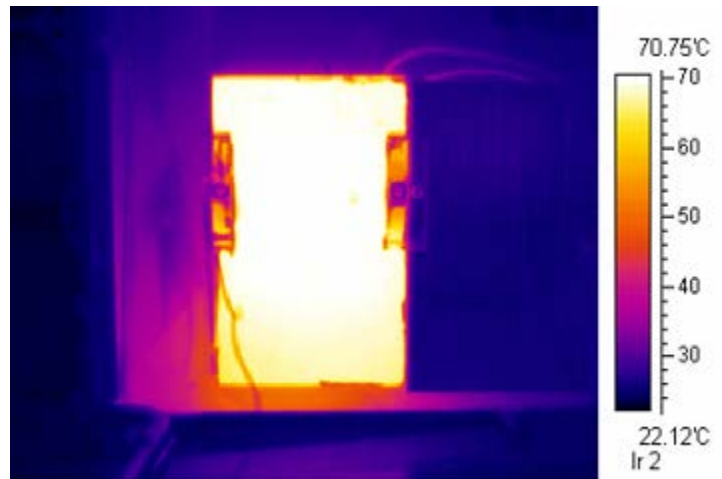
### a) Unique HEAT PIPE and VAPOR CHAMBER Technology



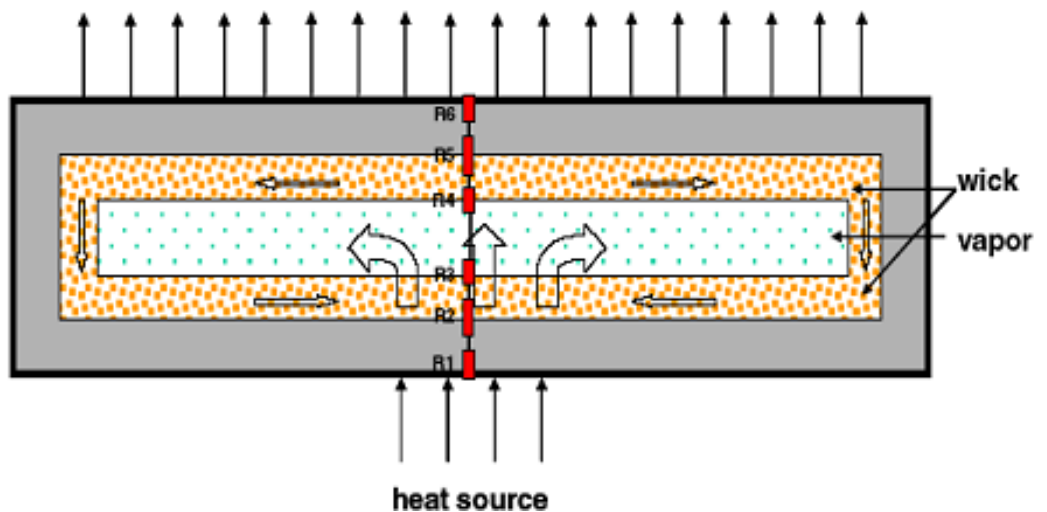
- Phase change loop cooling system, quicker heat diffusion
- No fin heat sink, the housing applied for heat dissipation
- Lower junction temperature:  $T_c \leq 45^\circ\text{C}$
- Higher fixture luminous efficacy: 90~100lm/W
- Less lumen depreciation: <1% (3,000hrs tested)
- Longer lifespan >50,000hrs
- Less weight: minimum 4.5kg

#### Phase change cooling system

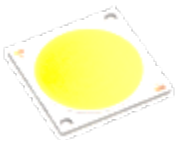
Higher thermal conductivity  
 Swifter heat diffusion, subtle temperature deviation  
 Even heat distribution on housing  
 The whole shell as heat sink, less weight and cost



#### Principle of VAPOR CHAMBER



## b) High Efficient LIGHT ENGINE

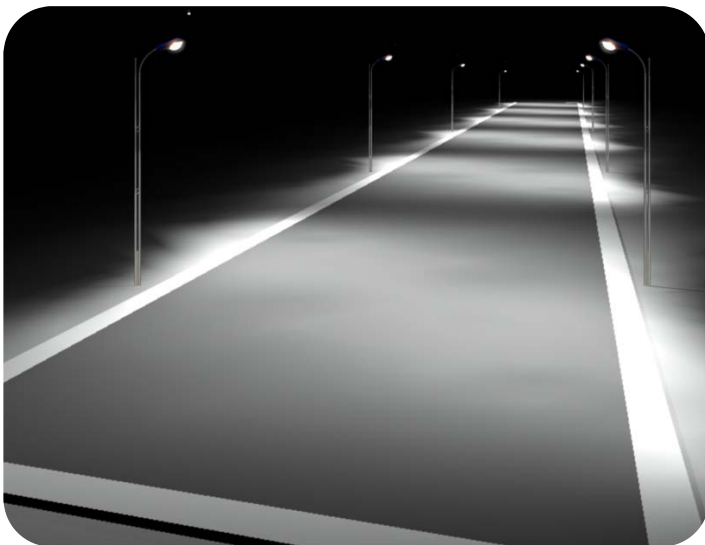
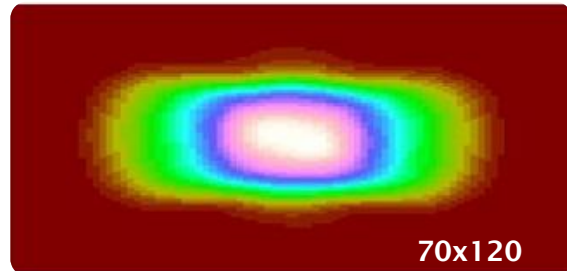
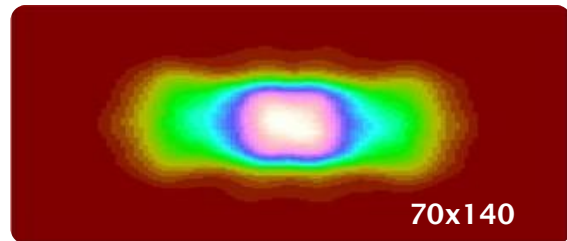
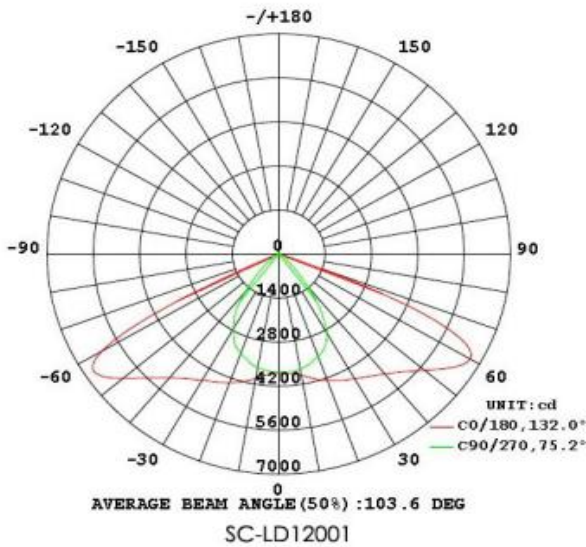


- Imported COB chips
- High efficacy, up to 120lm/W
- Stable lamination
- No overlapped images

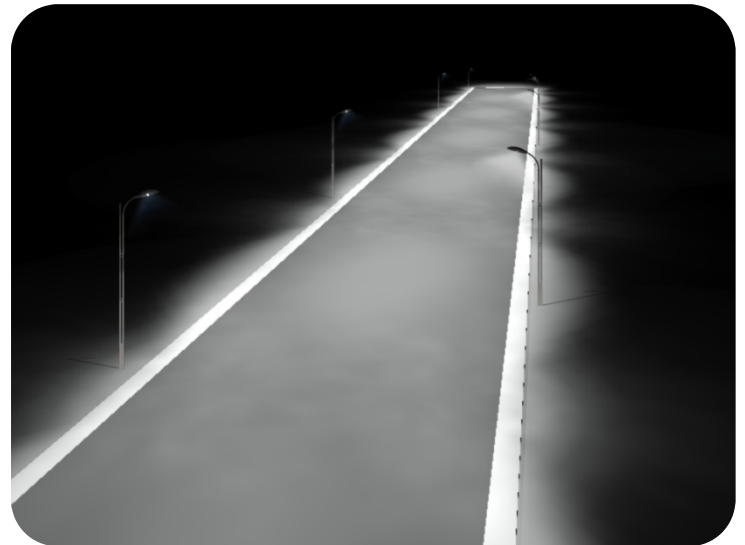
- Self patented lens
- 70°X120°/70°X140° beam angle
- High Transmission
- Rectangular Beam
- Reduced glare and increased visibility

- World famous drivers
- High efficiency
- IP67, safety and reliability
- Easy replacement

### INTENSITY DISTRIBUTION DIAGRAM IN C



Traditional HPSL Lighting Simulation



EIC LED Street Lighting Simulation



**Before**

- No light wasted
- Brighter and clearer visibility
- Less power consumption



**After**

- Better light distribution and less light pollution
- Higher color rendering index

### c) Retrofit Capability

Our product have the capability to replace current HPSL. The following table listed is the equal retrofit comparason, ex. Our 45W LED street light can be used to replace 100-150W HPSL. The replacement will save 60%-75% of energy.

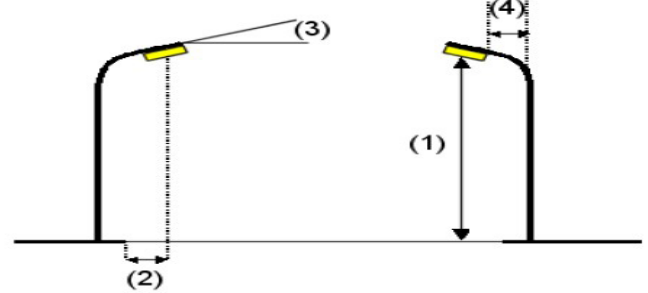
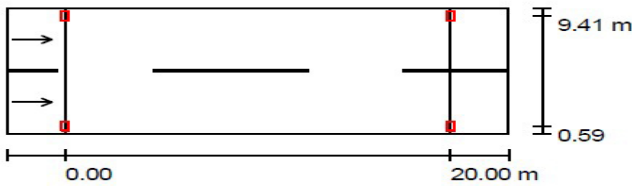
Item	Traditional HPSL		EIC LED Street Light	
	Nominal Power (W)	Real Power (W)	Nominal Power (W)	Real Power (W)
Lamp a	400W ~ 500W	460W~580W	180	180
Lamp b	350W ~ 450W	400W~510W	150	150
Lamp c	250W ~ 400W	290W~460W	120	120
Lamp d	250W ~ 400W	290W~460W	90	90
Lamp e	150W ~ 250W	180W~290W	65	65
Lamp f	100W ~ 150W	110W~180W	45	45
Lamp g	70W ~ 100W	80W~110W	30	30

Note: the replacement is a general retrofit comparason. The retrofit will be proceeded after previewing the actual requirements and condition or results expected to achieve.

## d) Professional Lighting Solutions



We are not only high quality LED street light manufacturer, but also have the ability to provide lighting solutions and financial calculation for customers' reference. Please contact us for project quotation.



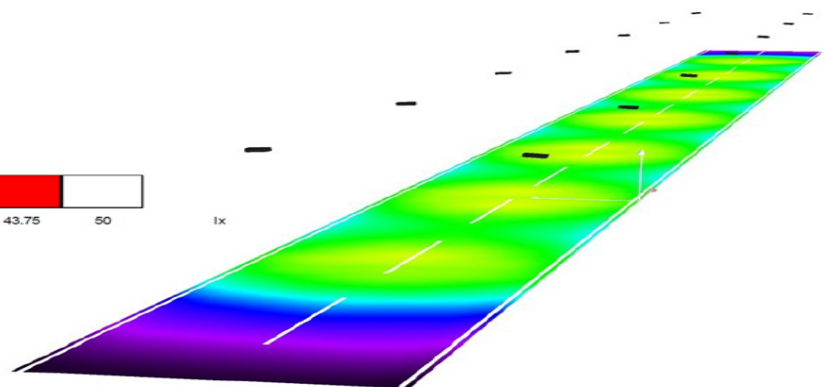
**Luminaire:** EIC ELECTRONIC SC-LD06501 65W Street Light 70\*120  
**Luminous flux (Luminaire):** 6230 lm  
**Luminous flux (Lamps):** 7225 lm  
**Luminaire Wattage:** 66.2 W  
**Arrangement:** Double row, opposing  
**Pole Distance:** 20.000 m  
**Mounting Height (1):** 8.000 m  
**Height:** 7.885 m  
**Overhang (2):** 0.600 m  
**Boom Angle (3):** 5.0 °  
**Boom Length (4):** 1.000 m

**Maximum luminous intensities**  
 at 70°: 92 cd/klm  
 at 80°: 13 cd/klm  
 at 90°: 6.34 cd/klm

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with luminous intensity class G3.

Arrangement complies with glare index class D.6.



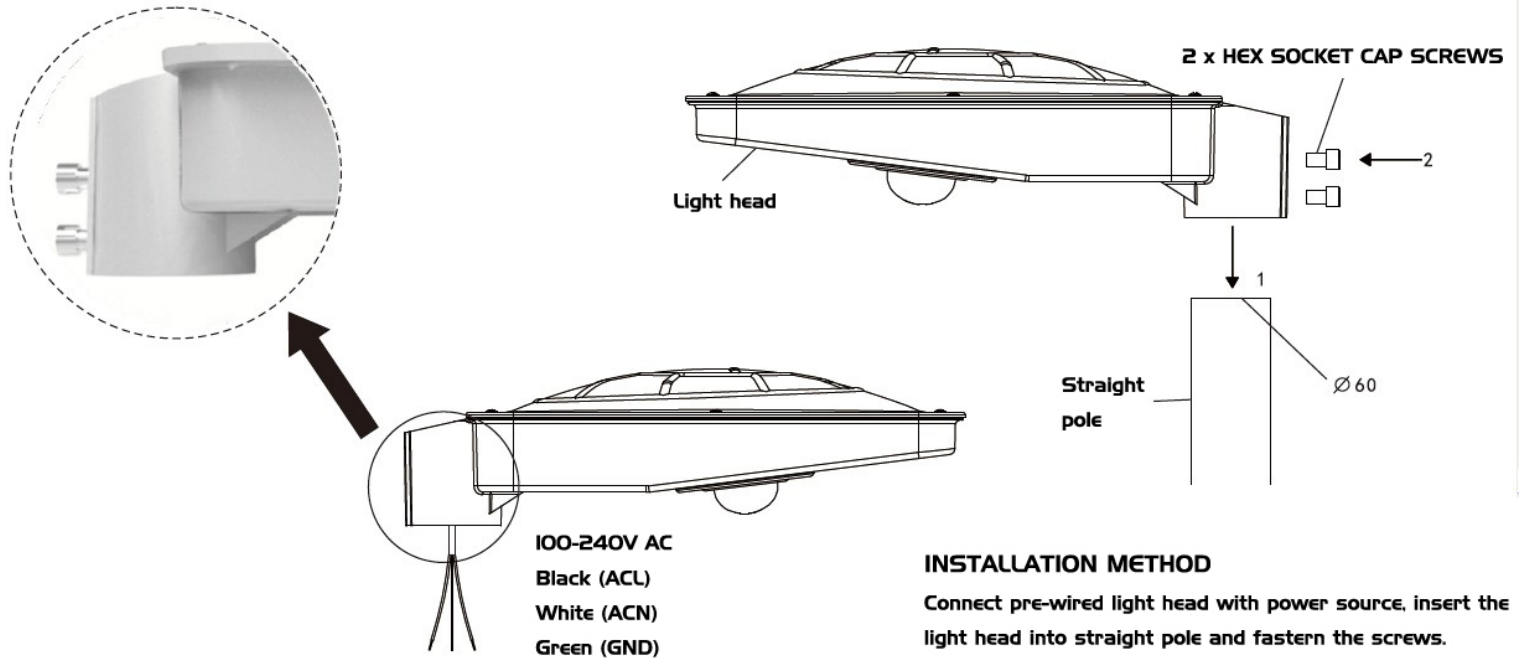
**Street 1**  
 Length: 20.000 m, Width: 10.000 m  
 Grid: 10 x 6 Points  
 Accompanying Street Elements: Street 1.  
 tarmac: R1, q0: 0.100  
 Selected Lighting Class: ME4a

(All lighting performance requirements are met.)

**Calculated values:**  
**Required values according to class:**  
**Fulfilled/Not fulfilled:**

$L_{av}$ [cd/m <sup>2</sup> ]	U0	UI	TI [%]	SR
2.26	0.84	0.88	2	0.53
≥ 1.50	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
✓	✓	✓	✓	✓

## e) Installation



Model	Power	Suggested Mounting Height
SC-LD03003	30	3-5m
SC-LD04501	45	6-8m
SC-LD06501	65	6-8m
SC-LD09001	90	6-8m
SC-LD12001	120	8-10m
SC-LD15001	150	8-10m
SC-LD18001	180	≥10m

## f) Certificates and Patents

Total 41 patent applications were submitted

- 20 passed patents
- 21 pending patents
- 1 international patent application





All LED street lights have passed certificates from:

- European Standard: CE, RoHS
- American Standard: FCC, UL(pending)
- Australasia Standard: C-tick, SAA
- Japanese Standard: PSE, IC
- ISO quality system



## Other declarations

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent or other industrial or intellectual property rights.