

# Hybrid

#### Interchangeable integrated LED downlights

- Interchangeable LED modules for flexibility
- High quality integrated styling

- Greater performance and product life
- LevLink™ ultra fast push-fit connection system\*

#### Advanced LED lighting

Hybrid9<sup>™</sup> 10 year extended warranty. Hybrid7<sup>™</sup> 5 year extended warranty. Requires online registration. Visit jcc.co.uk/warranty to register your product. \*Levlink<sup>™</sup> available as standard with Hybrid 9 only.



# Hybrid.

#### TECHNOLOGY IN YOUR HANDS

Hybrid™ has been developed to deliver the latest in integrated technology, coupled with the flexibility of an LED lamp. The combined bezel and LED module can be detached from the fitting as easily as removing an LED lamp.

However, unlike LED lamps, Hybrid™ products provide the styling and performance of a true integrated fitting. This revolutionary design allows customers to easily replace products at the end of life, upgrade their lighting and remove during redecorating.

Hybrid™ products incorporate Acrich3™ mains driverless technology from leading LED chip manufacturer Seoul Semiconductor. This delivers outstanding levels of performance and energy savings across the range with enhanced reliability for complete peace of mind.





660 lumens

COOL WHITE (4000K)

#### THE INTERCHANGEABLE INTEGRATED LED DOWNLIGHT



620 lumens WARM WHITE (3000K)





78 LpcW LUMENS PER CIRCUIT WATT







#### Hybrid7

#### THE INTERCHANGEABLE INTEGRATED LED DOWNLIGHT



500 lumens COOL WHITE (4000K)

450 lumens WARM WHITE (3000K)







69 LpcW LUMENS PER CIRCUIT WATT







#### Hybrid7 Overbezel

#### THE INTERCHANGEABLE RETROFIT LED DOWNLIGHT



500 lumens COOL WHITE (4000K)

450 lumens WARM WHITE (3000K)



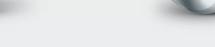




69 LpcW LUMENS PER CIRCUIT WATT







Overbezel designed for use with standard JCC Fireguard® Twist & Lock cans only.

\*Hybrid9™ 10 year domestic warranty and 5 year commercial warranty. Requires online registration

# Interchangeable integrated technology

#### INTEGRATED STYLING WITH THE FLEXIBILITY OF A LAMP

Hybrid<sup>™</sup> uses a combined bezel and LED module that can be easily detached from the fitting in the same way that you would remove an LED lamp. However, unlike LED lamps, Hybrid<sup>™</sup> products provide the aesthetics and performance of an integrated LED downlight.

#### **ADVANTAGES OF HYBRID™ TECHNOLOGY**

#### **& LED LAMPS**

- Seasily replaced by end user
- Simple to adapt if room use changes
- × Poor styling, often leaving gaps
- × Poor thermal management
- 🗙 Lower performance and life time

#### **TRADITIONAL INTEGRATED**

- Cannot be replaced by end user
  Cannot adapt if room use changes
- High quality integrated styling
- Senhanced thermal management
- ✓ Greater performance and product life

#### ✓ HYBRID™

- Easily replaced by end user
- Simple to adapt if room use changes
- ✓ High quality integrated styling
- Enhanced thermal management
- ✓ Greater performance and product life



# Easily upgrade at end of life

Unlike traditional integrated fixtures, Hybrid™ products can be changed as easily as a lamp. The LED module and bezel combination encapsulates all of the technology into a single unit, delivering all of the benefits of a true integrated fixture with the flexibility of a lamp.

- ⊘ Easily replaced by end user
- ⊘ Simple to adapt if room use changes
- $\odot$  High quality integrated styling
- Enhanced thermal management
- $\bigcirc\,$  Greater performance and product life





# Simple to remove during decorating

Painting ceilings is made easy by simply removing the front of the fitting. This avoids getting paint onto the fixture during redecorating and makes painting far quicker.

- $\oslash\,$  No paint on bezels
- ⊘ No damaged or scratched bezels
- No masking bezels off to paint ceilings



⊘ NO PAINT ON BEZELS

### Change fittings with ease

In contrast to traditional integrated fixtures, Hybrid<sup>™</sup> products provide complete flexibility to change the bezel finish or colour temperature of the fixture as desired. All Hybrid<sup>™</sup> products are available in brushed nickel, chrome and white finishes with both 3000K warm white and 4000K cool white options.

**FINISHES** 







#### **COLOUR TEMPERATURES**





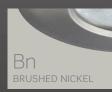
# Revolutionary product design

Hybrid's revolutionary design blends the next generation of integrated technology with the features and benefits associated with separate lamps. This is achieved by consolidating all of the technology into a single, replaceable unit, which provides the styling associated with true integrated fixtures.

The body of the fitting remains in the ceiling void and is engineered from the highest quality materials to ensure maximum durability. Separating the technology from the body of the fixture negates the need to remove the entire fitting from the ceiling at the point of replacement.

1

#### **AVAILABLE IN:**







### Technology

LED MODULE AND LENS

#### DIE-CUT ALUMINIUM BEZEL

Featuring the traditional high quality JCC bezel, the detachable LED module and bezel allows for future upgrades and easy redecoration.

#### **CRYSTAL CLEAR OPTICS**

Low glare, high clarity lenses ensure maximum LED efficiency and even light distribution.



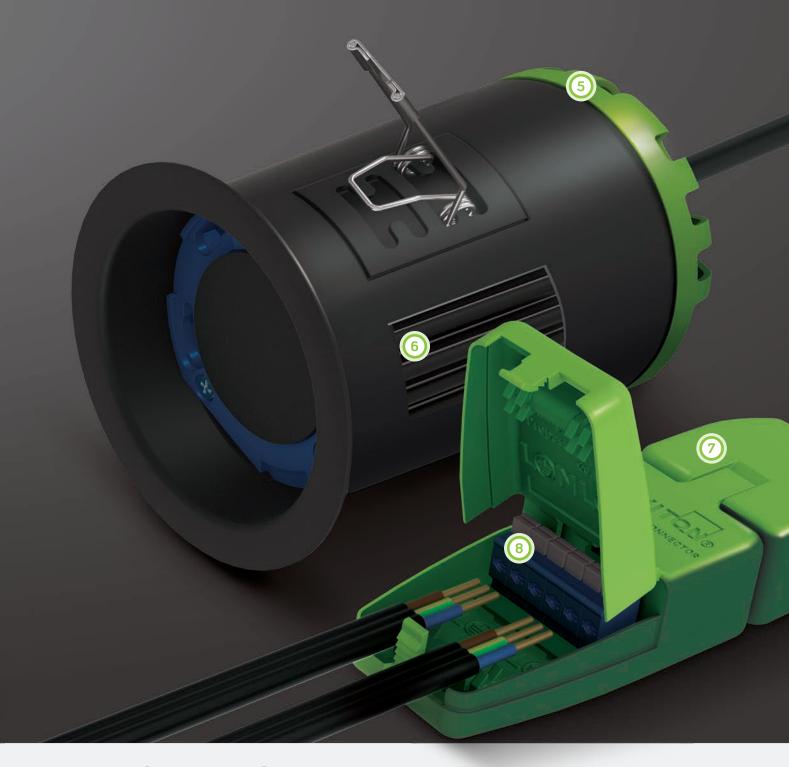
#### LED MODULE

**TWIST & LOCK DESIGN** 

Using the latest high performance driverless LED technology, Hybrid™ delivers outstanding levels of performance and efficiency with enhanced reliability.

#### (4)

The three GU10 pins allow for easy removal whilst providing the styling associated with integrated fittings.



# Engineering

CAN, HEAT SINK AND LEVLINK™ CONNECTOR

#### 5 TOP AIRFLOW CAP

The top airflow cap allows installers to lay mineral wool insulation directly over the top of the fitting. This further reduces installation time, without compromising reliability.

#### PILLAR HEAT SINK

6

Drawing heat away from the LED chip, the pillar heat sink maintains the luminaire's optimum operating temperature.



8

#### LEVLINK<sup>™</sup> CONNECTOR

The fully detachable LevLink™ connector allows for first fix wiring and high voltage circuit testing whilst the luminaire is detached from the LevLink™ connector.

#### **TOOL-LESS WIRING**

The press-fit terminal block and hinged housing enables significantly faster wiring than traditional screw fix connectors.

### Advanced thermal design

#### MAXIMUM LIFE & RELIABILITY

The performance and reliability of LED fittings rely heavily on the ability to manage heat dissipation in order to maintain the LED chips correct operating temperature. This process is often referred to as thermal management and plays a pivotal role in all LED products.

Hybrid9™ incorporates our new pillar heat sink configuration that allows increased airflow within the fitting, efficiently controlling heat dissipation which ensures that the maximum product life is achieved.



#### Outstanding thermal dissipation

Hybrid9's innovative thermal design has been developed to provide maximum heat management within the fitting and deliver enhanced product reliability.

#### THERMAL PLATE

The thermal plate ensures complete conduction between the LED chip and the pillar heat sink.

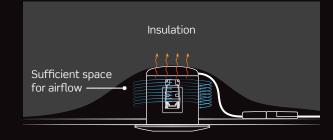
#### HEAT SINK

The heat sink draws heat away from the thermal plate and dissipates into the surrounding air.

# Lay insulation directly over the top

Hybrid9<sup>m</sup> incorporates a unique fixed top airflow cap design. This ensures that when the fitting is placed into a ceiling that contains insulation, a clear space is created around the fitting.

- ⊘ No need to cut holes in mineral wood insulation
- $\bigcirc$  No need for firehoods or fire cages
- $\oslash$  No need for insulation accessories



#### Ultra strong ceiling clips

Hybrid<sup>™</sup> comes complete with our renowned high strength stainless steel clips. This ensures that the body of the fitting remains securely fixed in place within the ceiling beyond the life of the LED module.

- ⊘ Ultra strong secure fitting into ceiling
- Adjustable for different ceiling thicknesses
- Maintains fitting position whilst replacing modules
- Quick and easy installation



#### Lifelong LED performance

#### **50,000 HOUR ULTRA LONG LIFE**

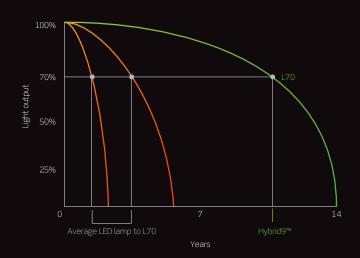
Thanks to our intelligent thermal design, Hybrid9<sup>™</sup> maintains optimum operating temperature during use to maintain an outstanding L70, up to 60% longer than a standard LED lamp.

> Go online to find out more: jcc.co.uk/lighting-explained

#### OUTSTANDING

50,000Hr Ultra long life to 170

Figures based on 12 hours usage per day, 365 days per year.



### Leading LED innovation

#### THE LATEST DRIVERLESS TECHNOLOGY

In addition to the revolutionary detachable design, Hybrid™ products use the very latest cutting edge LED innovation.

#### **NEW HIGH SPECIFICATION LED CHIPS**

Hybrid9<sup>™</sup> driverless technology eliminates the need for the traditional remote driver, all of the required electrical components are now placed on the same printed circuit board (PCB) as the LED COB.

#### **CRYSTAL CLEAR LENS TECHNOLOGY**

Hybrid™ uses our unique crystal clear lens technology that provides smooth and even light distribution.

230V 08W 50/60Hz 1JD-JC3D08W4P#-R1.

Hybrid<sup>™</sup> products incorporate the latest innovation from leading LED chip manufacturer Seoul Semiconductor. Using their latest Acrich3<sup>™</sup> driverless technology, Hybrid<sup>™</sup> delivers outstanding levels of performance and efficiency with proven chip reliability.



SEOUL SEMICONDUCTOR ACTICh3

- Mains driverless technology
- Eliminates need for remote driver
- Improves product reliability
- Consolidates LED technology into replaceable unit
- Enhanced flicker-free performance

### Easily replaceable LED modules

#### SWITCH MODULES QUICKLY & EASILY



**STEP 1** Remove previous LED module by rotating anti-clockwise..



**STEP 2** Align the three GU10 pins with their respective holes within the can.



**STEP 3** Secure the LED module in place and rotate clockwise.

#### Dimmable as standard

Advanced Triac dimming components enables smooth dimming, with a typical minimum dimming range as low as 10% with JCC's Triac LED Dimmer.

Furthermore, Hybrid9 $^{\rm M}$  is dimmable as standard and compatible with both leading and trailing edge dimmers.

LEVITON LED DIMMER SWITCH > LEV71906



# Fully fire-rated for peace of mind

Hybrid™ products are rigorously fire tested to provide fire safety that you can trust.

Complies with Part L, B, C and E of the latest building regulations.



#### **30 MINUTE CEILING**

600mm joist centre Single layer 12.5mm plasterboard



#### **60 MINUTE CEILING**

600mm joist centre Double layer 15.0mm plasterboard



#### **90 MINUTE CEILING**

450mm joist centre Double layer 15.0mm plasterboard

# LevLink

#### **ULTRA FAST, TOOL-LESS CONNECTORS**

#### First fix installation

LevLink™ has been designed to allow for first fix installation. This allows testing of the circuit to be carried out prior to the installation of the fitting, minimising the risk of damage. The secure cable restraint ensures complete peace of mind during installation.

#### WHY FIRST FIX?

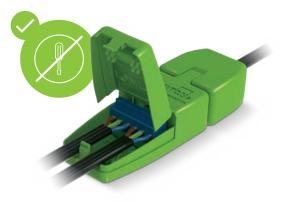
- ⊘ Reduces risk of damage to the fittings during installation
- Allows full testing of the circuit before fittings are connected



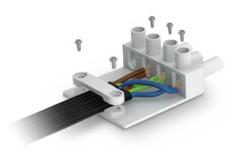
#### No tools required

LevLink™ uses push-fit termination which unlike traditional screw-fit terminals, requires no tools for installation. Simply align the live, earth and neutral wires with the respective terminals and the PCB reconfigures without the need to overlay or place two wires into a single terminal.

#### **⊘ LEVLINK™ PUSH-FIT CONNECTOR**



#### ⊗ TRADITIONAL SCREW FIT CONNECTOR



#### Ultra fast push-fit termination



WIDE ACCESS & LARGE TERMINAL BUTTONS

Wide access to the terminals, as well as large buttons, makes installation even quicker.





ACCEPTS BOTH SOLID & STRANDED CABLE

LevLink™ has been specifically designed to accommodate both solid and stranded cable types.

## Intelligent wiring system

#### AUTOMATICALLY REROUTES WIRING

The intelligent PCB design of LevLink<sup>™</sup> allows for wires to be placed directly into terminals without the need to overlay cables into single terminal holes. This means that you can cut the wires to a uniform length, rather than staggering the wire length to accommodate the need to overlap.

Simply align the live, earth and neutral wires with the respective terminals and the PCB reconfigures the wiring, omitting the need to overlay or overlap the wiring.

- Avoids the need to place multiple wires into a single terminal
- ⊘ Vastly reduces installation time

#### 1. LOOP-IN LOOP-OUT

Simple loop-in loop-out first fix installation is achieved by aligning the cables with their dedicated terminals.

#### 2. PUSH-FIT

The push-fit termination eliminates the need for tools and provides significantly faster installation.

#### Significantly faster switched live wiring

#### **9 WAY CONNECTOR & T-SPLITTER**

The LevLink™ 9-way connector used in conjunction with the T-splitter dramatically reduces the speed of first fix switched live wiring. In addition, this also enables installers to replace existing ceiling rose wiring.

See page 12 for more information about the LevLink<sup>™</sup> system.

### How does LevLink<sup>™</sup> work?

#### QUICK AND SIMPLE TO SET UP

- Plug and play press-fit design
- Wide access to large terminal buttons
- Accepts both solid & stranded cables

- 9-Way & T-Splitter to incorporate switched live wiring schemes
- Loop-in loop-out screwless wiring
- JC81001 9-Way connector exclusively for Hybrid9™

#### SWITCHED LIVE CABLE

#### LEV81003 9-Way Connector

LEV81002
 T-Splitter

#### JCC dimmer switch

- Fully compatible with Hybrid9™ and Hybrid7™
- Maximum load of 100W LED
- Flicker free performance

#### **FINISHES**

Wh
WHITE

CODE	DESCRIPTION
LEV <b>71906</b>	JCC dimmer switch

100W

#### HYBRID9<sup>™</sup> FITTINGS

Hybrid9™ fittings come pre-wired with a LevLink™ 6 Way Connector as standard.

LEV81004
 6 Way Connector

LEV81004
 6 Way Connector

AVAILABLE NOVEMBER



^ LevLink™ 6 Way incl. 3 way male LEV81004



^ LevLink™ 9 Way incl. 3 way male LEV81003



LevLink<sup>™</sup> accessories

^ LevLink™ T-Splitter LEV81002

# Hybrid9.

#### THE INTERCHANGEABLE INTEGRATED LED DOWNLIGHT



620 lumens WARM WHITE (3000K)



- Comes with the ultra-fast LevLink™ 6 Way Connector
- Push-fit 'tool-less' installation
- Mains driverless technology

8.5W LED TOTAL WATTAGE



78 LpcW LUMENS PER CIRCUIT WATT

- Lay insulation on top of fittings no additional accessories
- Enclosed can for maximum fire safety
- Provide end users with the flexibility to upgrade lighting
- Dimmable as standard

✓ JC94901CH





CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP
JC <b>94901</b>	Hybrid9™ LED downlight	Cool White	8.5W	660	78	38°	IP65
JC <b>94903</b>	Hybrid9™ LED downlight	Warm White	8.5W	620	73	38°	IP65
LEV81001	LevLink™ 9 Way Connector - Female only	-	-	-	-	-	IP20
LEV81002	LevLink™ T-Splitter	-	-	-	-	-	IP20
LEV81003	LevLink™ 9 Way Connector - Female incl. 3 Way Male	-	-	-	-	-	IP20
LEV <b>81004</b>	LevLink™ 6 Way Connector - Female incl. 3 Way Male	-	-	_	-	-	IP20

#### HYBRID9™ LED SPARE MODULES

- Additional LED modules for Hybrid9™ fittings
- Available in cool and warm white

- Quick and easy twist and lock installation
- Available in brushed nickel, chrome and white



✓ SPR94901CH





✓ SPR94901WH

#### FINISHES

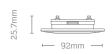






BRUSHED NICKEL





CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP
SPR <b>94901</b>	Hybrid9™ LED module only	Cool White	8.5W	660	78	38°	IP65*
SPR <b>94903</b>	Hybrid9™ LED module only	Warm White	8.5W	620	73	38°	IP65*
*IP65 once installed							

# Hybrid7

#### THE INTERCHANGEABLE LED DOWNLIGHT

#### Comes as a fully integrated fitting

Hybrid7<sup>™</sup> has been developed to deliver a cost effective interchangeable LED downlight solution. The GU10 LED module delivers outstanding performance of up to 500 lumens and incorporates the same Acrich3<sup>™</sup> driverless technology that is used throughout the Hybrid<sup>™</sup> range. The crystal clear honeycomb lens focusses light from the 3 LED array to provide crisp and clear light distribution.

#### ADJUSTABLE CEILING CLIPS

Pre-connected high strength stainless steel clips designed to accommodate different thickness of ceilings.

#### **GU10 CONNECTION**

The GU10 connector provides the flexibility of a lamp, with the styling of an integrated fitting.

#### HYBRID7™ MODULE

Hybrid™ LED modules use the latest driverless technology from leading LED chip manufacturer Seoul Semiconductor.

#### **PRESS-FIT TERMINATION**

Loop-in loop-out press-fit terminal dramatically reduces installation time.



### Intelligent thermal design

#### LARGE HEAT SINK IMPROVES THERMAL MANAGEMENT

Hybrid7<sup>™</sup> features a larger heat sink than standard LED lamps. JCC have maximised the available space in the can to allow Hybrid7<sup>™</sup> to efficiently and safely dissipate heat generated by the LED chips. This improves reliability and ensures a longer life compared to LED lamps.



HYBRID7™ MODULE

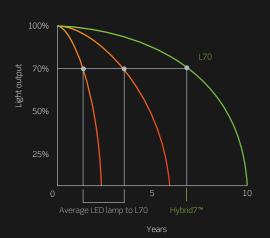
TYPICAL LED LAMP

#### Lifelong LED performance

#### LAST TWICE AS LONG AS TRADITIONAL LED LAMPS

Thanks to our intelligent thermal design, Hybrid7<sup>™</sup> maintains optimum operating temperature during use to maintain an outstanding L70 of 30,000 hours, up to twice as long as traditional LED lamps.

> Go online to find out more: jcc.co.uk/lighting-explained



Figures based on 12 hours usage per day, 365 days per year.

# Hybrid7

#### THE INTEGRATED INTERCHANGEABLE LED DOWNLIGHT



450 lumens WARM WHITE (3000K)





69 LpcW LUMENS PER CIRCUIT WATT

- Interchangeable LED module with integral bezel •
- Provides integrated styling with new Hybrid™ technology
- High performance 500 lumen output

30,000 hour life 38° beam angle

Dimmable as standard

✓ JC94701CH



#### **FINISHES**

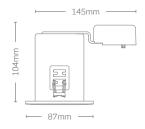
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CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP	
JC <b>94701</b>	Hybrid7™ LED downlight	Cool White	7.2W	500	69	38°	IP65	
JC <b>94703</b>	Hybrid7™ LED downlight	Warm White	7.2W	450	63	38°	IP65	
Includos ICC E	Includes ICC Financial standard							

des JCC Fireguard® can as standard

#### HYBRID7™ LED SPARE MODULES

- Additional LED modules for Hybrid7™ fittings
- Available in cool and warm white

- Quick and easy twist and lock installation
- Available in brushed nickel, chrome and white



	CODE	DESCRIPTION	COLOOK TEMP.	LED	LOMENS	LPCW	DEAM	IP	
	SPR <b>94701</b>	Hybrid7™ LED module only	Cool White	7.2W	500	69	38°	IP65*	
	SPR <b>94703</b>	Hybrid7™ LED module only	Warm White	7.2W	450	63	38°	IP65*	
*IP65 once installed									

# Hybrid7 Overbezel

#### THE INTERCHANGEABLE RETROFIT LED DOWNLIGHT



450 lumens WARM WHITE (3000K)





69 LpcW LUMENS PER CIRCUIT WATT

- Overbezel retrofit option of Hybrid7<sup>™</sup>
- Increased bezel size to fit over existing downlights
- Provides new fascia to old fixtures

- Only for use with standard JCC Fireguard® Twist & Lock fittings
- Expanded heat sink for greater product reliability
- Maintains fire-rating when installed

✓ JC94711CH Overbezel





CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP
JC <b>94711</b>	Hybrid7™ Overbezel module only	Cool White	7.2W	500	69	38°	IP20
JC <b>94713</b>	Hybrid7™ Overbezel module only	Warm White	7.2W	450	63	38°	IP20

# Provides a new fascia to existing downlights

Hybrid7™ Overbezel allows you to fit a new LED module into an existing JCC Fireguard® Twist & Lock can. The bezel has been specifically designed to discretely cover the existing fixed bezel attached to the can.

This provides a full new front fascia for older fittings whilst still maintaining the look of an integrated LED downlight. Furthermore, fire safety is maintained for complete peace of mind.

#### AVAILABLE IN:



Сh



BN BRUSHED NICKEL



Wh white



#### Installation couldn't be easier

A SIMPLE THREE STEP INSTALLATION



STEP 1

Take the Hybrid7™ Overbezel fitting and connect it to the JCC Fireguard® Twist & Lock GU10 connector.



**STEP 2** Place the Hybrid 7<sup>™</sup> Overbezel fitting into the can until the bezel is flush with the ceiling.



#### **STEP 3**

Rotate the bezel until it locks firmly into the can and is tightly secured against the ceiling.

Hybrid7<sup>™</sup> Overbezel has been specifically designed for use with JCC Standard Fireguard® Twist & Lock fire-rated fittings. For more information on compatible product codes, please go to jcc.co.uk/Hybrid7\_Overbezel

#### Hybrid9

CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP
JC <b>94901</b>	Hybrid9™ LED downlight	Cool White	8.5W	660	78	38°	IP65
JC <b>94903</b>	Hybrid9™ LED downlight	Warm White	8.5W	620	67	38°	IP65
SPR <b>94901</b>	Spare Hybrid9™ LED module	Cool White	8.5W	660	78	38°	IP65*
SPR <b>94903</b>	Spare Hybrid9™ LED module	Warm White	8.5W	620	67	38°	IP65*

#### Hybrid7

CODE	DESCRIPTION	COLOUR TEMP.	LED	LUMENS	LPCW	BEAM	IP
JC <b>94701</b>	Hybrid7™ LED downlight	Cool White	7.2W	500	69	38°	IP65
JC <b>94703</b>	Hybrid7™ LED downlight	Warm White	7.2W	450	63	38°	IP65
SPR <b>94701</b>	Spare Hybrid7™ LED module	Cool White	7.2W	500	69	38°	IP65*
SPR <b>94703</b>	Spare Hybrid7™ LED module	Warm White	7.2W	450	63	38°	IP65*
JC <b>94711</b>	Hybrid7™ Overbezel LED module	Cool White	7.2W	500	69	38°	IP20
JC <b>94713</b>	Hybrid7™ Overbezel LED module	Warm White	7.2W	450	63	38°	IP20
JC <b>94213</b>	Fireguard® Twist & Lock can	-	-	-	-	-	IP20

#### LevLink

CODE	DESCRIPTION	IP
LEV <b>81001</b>	LevLink™ 9 Way Connector - Female	IP20
LEV81002	LevLink™ T-Splitter	IP20
LEV81003	LevLink™ 9 Way Connector - Female includes 3 Way Male	IP20
LEV81004	LevLink™ 6 Way Connector - Female includes 3 Way Male	IP20

#### **TECHNICAL DETAILS**

LED	CONSTRUCTION	CLASS	CUT OUT
Warm White 3000K CRI: Ra (80)	Body - Pressed Steel	🕒 Class 1	Hybrid7™ - 72mm
Cool White 4000K CRI: Ra (80)	Bezel - Die Cast Aluminium	Hybrid9™ & Hybrid7™ - IP65   Zone 1   240V	Hybrid 9™ - 76mm
	Maximum void working temperature - 30°C	Hybrid7™ Overbezel - IP20   240V	

#### Calculate your own cost saving

#### DOWNLOAD OUR COST SAVING CALCULATOR

Download JCC's free cost saving app to see how much money you could save by using any Hybrid™ fitting. Simply enter the number of fittings that you require and see your precise energy reduction and cost savings.



JCC's cost saving app is available for free on both iOS & Android devices.

\*IP65 when installed

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Morie