

INDO

fresh thinking
trusted technology



LED RETROFIT

GEAR TRAY RANGE



The management system governing the manufacture of these products is ISO 9001:2015 certified

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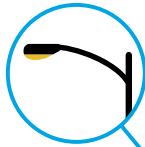
 www.indolighting.com

INDO GEAR TRAY RANGE

Heritage



Functional



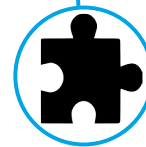
Contemporary



Re-use existing seals & housing



Capital saving AND low maintenance



Single component system



Wide range of lanterns designed



Features

- Direct Drive® technology
- Pre-programmable dimming
- Bespoke design for each lantern
- Lightweight, compact solution
- Standalone IP66 module
- No 3rd party components
- Integrated longlife photocell
- Excellent thermal management
- Lamp efficacy up to 145 lm/W
- CMS compatible
- 0.58 failures per million hours
- Wide range of fittings and optics

Benefits

- Up to 77% energy reduction
- Rapid payback
- Quick and easy installation
- Minimal column loading
- Low whole life cost and risk
- No driver or photocell maintenance
- IP66 module eliminates need for new seals
- Quality build for superior lifetime

INDO has developed bespoke gear tray solutions for over 60 different fittings... and counting

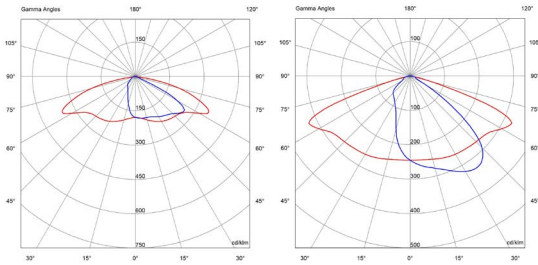
View the full list at www.indolighting.com/geartrays

Gear Tray	Product Code	Gear Tray	Product Code	Gear Tray	Product Code	Gear Tray	Product Code	Gear Tray	Product Code
CU Phosco P109	P109	Philips ARC 80	AR80	Thorn Orus	THOR	Urbis Lg Sepale	LSEP	Windsor Henley	WSRT
CU Phosco P567	P567	Philips ARC 90	AR90	Urbis Abbey	ABBM	Urbis Paseo 500	PAS5	Knightsbridge	KBRI
WH Mini Geodisc	MGEO	Philips SGS 252	SGS2	Thorn Orus	THOR	Urbis Hestia 1/2	HES1/2	Windsor Newport	WSRT
WH Geodisc 600	GEO6	Philips SGS 452	SGS2	Urbis Albany (L)	ALBL	Urbis Sepale (L)	LSEP	Windsor Salisbury	WSRT
WH Geodisc 750	GEO7	Philips Residium	RESI	Urbis Albany (S)	ALBS	Urbis Paseo 500	PAS5	Windsor Strand A	STRA
Grey Wornum (L)	LGWO	ScandiDelux	SCAN	Urbis Polo 600	POL6	Urbis Paseo 600	PAS6	Windsor Strand B	STRB
Grey Wornum (S)	SGWO	Se'lux Discera 400	MGEO	Urbis Polo 800	POL8	Urbis Sapphire	SAP1	Windsor Stratum	STRT
Holophane Estilo	ESTI	Se'lux Discera 600	GEO6	Urbis Cabrio 500	PAS5	Urbis Saturn 500	SAT5	Windsor Warwick	WSRT
Holophane Rondo	ROND	Sugg Tunbridge	TUNB	Urbis Cabrio 600	PAS6	Urbis ZX1/U1/12	UZX1	Windsor York	WSRT
Karl Johan Large	KAJL	Thorn Area Flood	OPT1	Urbis EvoLo2	EVO2	Windsor Braemar	WSRT	Windsor Street	WIST
Karl Johan Small	KAJS	Thorn Beta	BETA	Urbis Hestia 1	HES1	Windsor Ely B	STRB	WRTL Libra	LIBR

INDO GEAR TRAY RANGE

Photometry

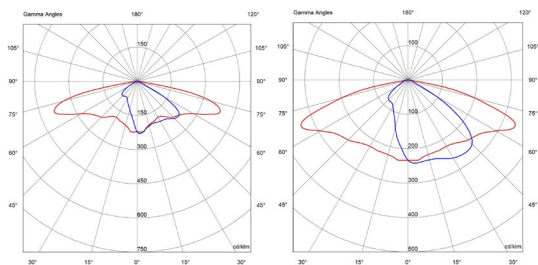
Example optics for traffic routes



NAVIGATOR M00

NAVIGATOR M10

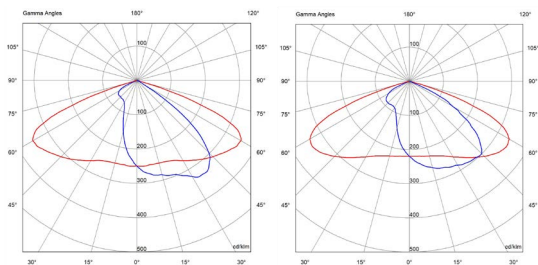
Example optics for residential



NAVIGATOR P00

NAVIGATOR P05

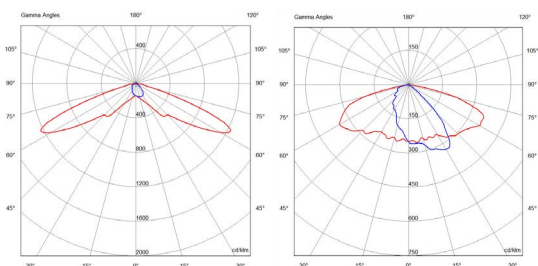
Example optics for public realm



CHROMA DR1

CHROMA DR5

Example optics for footpaths and residential



OPUS SWA

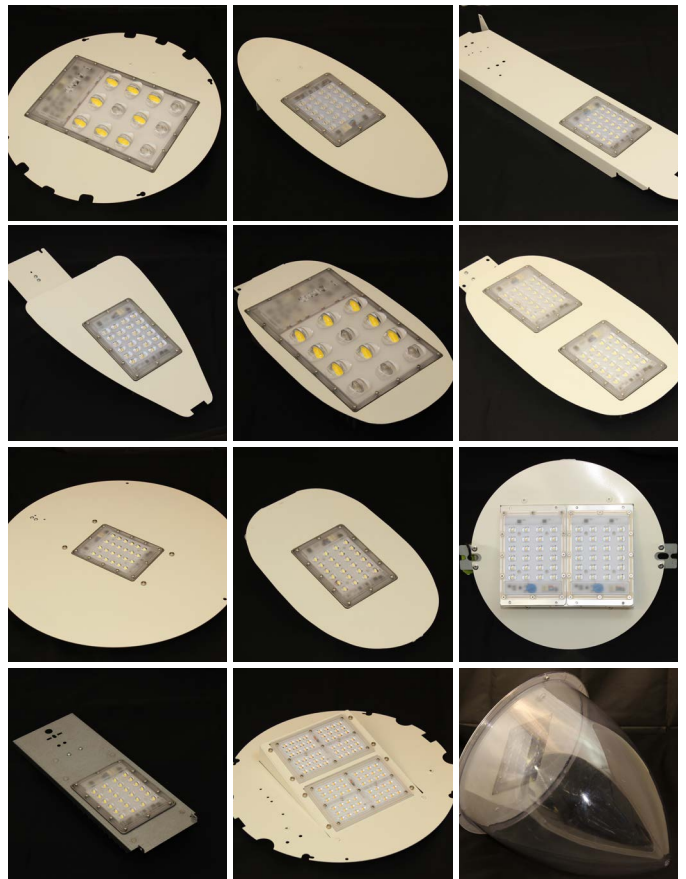
OPUS 1C

Product Overview

INDO sits at the forefront of the market with its impressive range of LED Direct Drive® retrofit gear trays. Available in a wide range of lumen outputs and colour temperatures, these units are cost-effective and simple to fit, boasting technologically advanced features to deliver exceptional energy saving and reliability, as well as significantly lower maintenance and whole-life costs.

This single component gear tray is a robust, standalone, IP66-rated product that doesn't need space for a driver or require new seals thus solving a range of engineer challenges. As with all our gear trays, these are customised lantern-specific solutions, designed to operate with maximum reliability for the long term. No wear-out components on board whatsoever i.e. no drivers or external photocells. This reduces ongoing maintenance costs (as well as energy throughout the scheme life and means customers need just one warranty for their complete LED street lighting solution.

Our modules are a) Opus; as used in AIR1 and great for footpaths and lower power applications b) Navigator; featuring cutting edge Chip Scale Package LED technology for improved efficacy, optical control and resilience in the mid-power range; and c) Chroma; featuring COBs for sensitive projects where high quality colour rendering and diffused light are priority



Gear Tray Technical Specifications

PRODUCT ORDERING OPTIONS

Gear Tray Model	See overleaf or website list
Power	10W to 143W
Lumen Output (4000K)	1,067lm to 20,000lm
Correlated Colour Temperature (CCT)	From 2200K to 5000K
Control Options	None, CLO, DALI
Internal Photocell	20/20, 35/18, 55/28 Not fitted or activated
Pre-set Dimming	Fixed pre-set 50% [00:00-05:00] pre-set 75% [00:00-05:00] pre-set, 2-step program
Optics	Opus 1C, SW, TSW, SWA, SWB, A1, A2, A3 Navigator M00-M10 Chroma DR1-DR5
Luminaire Colour	Not applicable

For more information on selecting the correct gear tray spec. to suit your luminaire, application and design criteria, please contact your local account manager direct or call the main office (option1 sales)

KEY FEATURES

Direct Drive®	Yes
Lighting Classes	P1-P6 M2-M5, C3-C5
Glare Control	Classifications up to G4
Replacement For	Up to 250W SON
Dimming Range (DALI)	100% down to 10% output
Constant Light Output	Yes
Reliability	Less than 0.85 failures per million operating hrs
Materials	Aluminium, Galvanised Steel

PHYSICAL PROPERTIES

IK Rating	IK08
IP Rating (Optic + Gear)	IP66
Windage	N/A
Dimensions (LxWxD)	Model specific
Net Weight	Up to 4kg (SKU dependent)
Operating Temperature Range	Up to -40°C to +40°C (housing dependent)

LEDs

Risk Group	RG1 (low risk)
LED Module Options	Opus, Navigator or Chroma
Lamp Efficacy (4000K)	Up to 174 lm/W
Lumen Maintenance at 100,000 hours	L93B50
Product Rated Life L90B50	125,000 hrs
Colour Rendering Index (CRI)	>70Ra
Direct Drive® Current	From 67.5mA to 450mA
SP Ratio (4000K)	Up to 1.7 (SKU dependent)

Exact LED specifications vary depending on selected light module and will be confirmed with product choices

ELECTRICAL

Input Voltage Range	195-265 V @50/60Hz
Operating Frequency	100 Hz
Power Factor	> 0.95
Soft Start	Yes
Extreme Soft Start	Yes
Automatic Disconnect	N/A
Fully CMS Addressable	Yes, some options
Photocell compatibility	N/A

A wide range of options are available to ensure customers can specify lanterns around their needs to gain cost-efficiencies.

INSTALLATION

Mounting Options	N/A
Mounting Heights	Lantern specific
Integrated Photocell	Yes
Shields available	Lantern specific
Future-proofing	On-site upgradable modules

Exact LED specifications vary depending on selected light module and will be confirmed with product choices

UMSUG CODES

Easy look up table available www.indolighting.com/umsug