

Data Sheets – Internal Node

ENERVEO

An internal Mayflower node is installed within a luminaire to control the on/off/dim function and reports back energy consumption information. It has been designed to fit within a luminaire body for situations where it is not practical or aesthetically pleasing to fit an external control solution e.g. bollards, signs, heritage and designer lanterns.

In conjunction with the Mayflower Antenna, the Mayflower Node receives lamp control commands from the Mayflower Sub Master. The Mayflower Node is able to monitor, record and transmit measurement data, as well as alerting the user to potential fault issues.

Product Code

INTIII/DALI
INTIII/0-10V

Antenna

IP65
11mm fixing hole

Elexon Charge Code

9800010011100

Power Supply	Switching	UK/EU Approvals
Voltage: 230V 50Hz Power consumption: <1W Supply voltage tolerance: +10% to -6% Voltage surge protection: 2KV Over current protection required: 10A BS88 or equivalent	Energy efficient latching relay Relay rating: 16A, 250V high in-rush	EN55015:2006 + A1 + A2 EN61547:2009 EN 301 489-1:2011 FCC 47 CFR Part 15 Class A FCC Part 15 Subpart C, 15.247 EN 300 328 IEC 61347-2-11:2011 IEC 61347-1:2007+A2:2012 IEC 61010 1:2010
Enclosure	Node Communication	AUS/NZ Approvals
IP42 UV stable Flame retardant	Zigbee IEEE 802.15.4 Licence free Multi-channel Dynamically configured mesh networking Self-healing capability Range: Up to 200m	AS/NZS 61010.1:2003 AS/NZS 4268:2012+A1:2013
Measurement	Ballast Communication Protocols	
Energy meter microchip Accuracy: +/-1% Voltage span: 200V to 260V Current span: 50mA to 4A Wattage span: 1W to 1000W	DALI (Digital Addressable Lighting Interface) 0 to 10V (analogue)	
Microcontroller	Radio Transceiver	
Flash programmable CPU Brown-out protection Watch-dog timer protection Run time clock plus 48hr supply protection	Frequency: 2405-2480MHz Modulation: O-QPSK Output power: <10 dBm Temperature: -20°C to +65°C	



Data Sheets - Stub Antenna

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A 2.4GHz Mayflower Antenna providing a tamper resistant solution to enable the Mayflower Internal Node to communicate with the Sub Master.

It is installed through a 20mm hole on the lighting unit. An adhesive foam compression ring provides an IP65 seal.

The Mayflower Antenna is designed to be ground plane independent and is supplied with 700mm low loss cable, terminated with a male SMA connector.

Product Code

AN/ND/T2-STUB

Enclosure

Main body material: Polycarbonate
Black UL94-VO
Fitting: Body mount
Fitting diameter: 20mm
Thread length: 25mm x M20
Lock nut: Nylon
Operating temperature range: -40°C to +80°C

RF Properties	Compliance	
Cable	Fitting Instructions	
Operating frequency: 2.4-2.5GHz	IP65	UV stable
Antenna type: Quarter wave	RoSH compliance	CE/IEC 60950-22
Input resistance: 50Ω	REACH	IK06 to BSEN50102
VSWR: <2:1	UL94-V0	
Polarization: Vertical		
Peak gain: 2 dBi		
Beam width: Omni directional		

