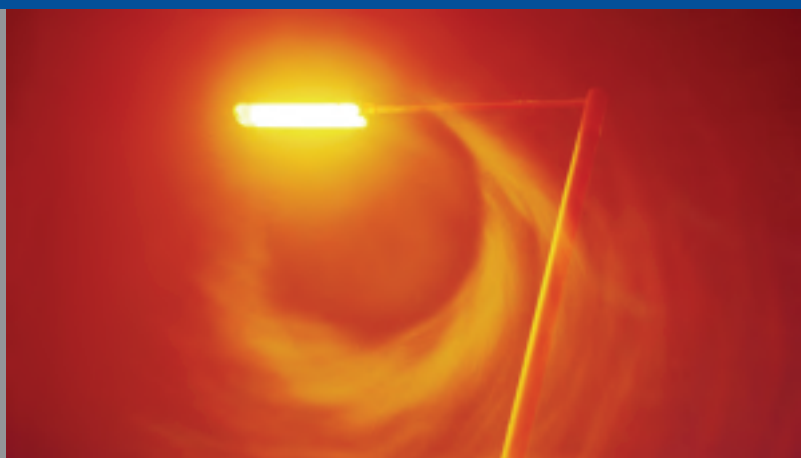# Vizion®

Intelligent Street Lighting Management System

THE SMARTER STREET LIGHTING MANAGEMENT SYSTEM

TECHNICAL SPECIFICATIONS

> INTEROPERABLE WITH OTHER WIMAC[868] PRODUCTS

> SIMPLE SYSTEM INTEGRATION

ZEBC SMART ELECTRONIC BALLAST

> Automatic lamp detection, suitable for metal halide, high pressure sodium and Cosmopolis lamps

> Interoperable product through WiMAC[868] enabled Central Management Systems (CMS)

> Use as stand alone ballast or integrate Vizion CMS system

> Diverse management capability when incorporated within Vizion CMS system (see table)

> Compliments the reliable Zodion ZEBA range

> Stable power consumption over full operating voltage range

> High efficiency ensures significant reduction in energy consumption

> Can be fitted as a single stand-alone unit now and then incorporated into the Vizion system at a later date

SPECIFICATION

	ZEBC 50	ZEBC 60	ZEBC 70	ZEBC 100	ZEBC 140	ZEBC 150
Lamp Types	50W HPS/CDMH	60W COSMO	70W HPS/CDMH	100W HPS/CDMH	140W COSMO	150W HPS/CDMH
	Not suitable for lamps with internal Ignitor					
Input Voltage Range	207-254V (50/60 Hz)					
Lamp Operating Frequency	160 Hz					
Nominal Input Current	0.27A	0325A	0.37A	0.50A	0.66A	0.70A
Nominal Power Consumption	55W	68W	79W	110W	153W	161W
Lamp Operating Power	50W	60W	71W	100W	140W	147W
Power Factor	> 0.95					
Ignition Voltage	2.5kVpk					
Lamp Wiring Limits	3m or 150pF (Cable needs to be rated for 2.5kV intermittent operation) Cable specification subject to confirmation					
Typical Warm up time	1.5 minutes (CDMH)					
Thermally Protected	Yes					
Enclosure	Anodised Aluminium Casing and Base					
Operating Temperature range	-20…..+50°C					
Storage temperature range	-40…..+85°C					
Maximum Case Temp (Tc)	80°C					
EMC & performance compliance	EN61000-3-2:2000 EN61347-2-12-2005 EN61000-3-3:2001					
Vizion Diverse Management Ballast when used with Vizion CMS system	Control: variable lighting – Dynamic switching regimes – time profiling Reporting : Lamp faults (Predictive / Actual) – Supply Faults					
Dimensions (in mm)	145 x 91 x 37 High					

BALLAST NODE

> Interoperable product through WiMAC[868] enabled Central Management Systems (CMS)

> Total Management when incorporated within Vizion CMS system (see table)

> Designed to integrate with the Vizion ZEBC Ballast to facilitate the variable lighting solution

> Light weight high impact resistance product

> Wide operating temperature range

TECHNICAL SUMMARY

Luminaire Fitting:	20mm hole, washer & nut seal
Onsite Protection:	Polycarbonate
IP rating:	IP 66 correctly fitted
Enclosure material:	Polycarbonate
Operating temperature range:	-30 - +75°C
Power Supply requirements:	Supplied from Vizion ZEBC Ballast
Receiver classification:	Class 2
Device classification:	Class 2
Performance Compliance:	EN300 220 / REC 70-03 Annex1 (g1)
Manufactured:	UK

NEMA NODE

The NEMA node is a retrofit solution replacing the existing nema photocell.

NEMA nodes offer a quick and convenient replacement for any street light that currently uses a NEMA photocell. Each NEMA node provides monitoring and switching of conventional and ECG gear. The NEMA node provides you with full system diagnostics detailing supply faults, predictive or actual lamp failures and power factor that may occur with conventional gear.

Dimming function not included.

TECHNICAL SUMMARY

|	
Luminaire Fitting:	20mm hole, washer & nut seal
Onsite Protection:	Polycarbonate
IP rating:	IP 65 correctly fitted
Enclosure material:	Polycarbonate
Operating temperature range:	-30 - +75 °C
Power Supply requirements:	Standard nema fitting
Receiver classification:	Class 2
Device classification:	Class 2
Performance Compliance:	EN300 220 / REC 70-03 Annex1 (g1)
Manufactured:	UK

THE HOST

The Host is a fully scalable database running on a managed web-server. The provision of this forms part of the service contract required to access the database. The Host is accessed via standard browser software and the user can manage the installation via this browser.

The Host allows password controlled access to the configuration and management of the Vizion deployment. It provides an interface for data to pass through for CMS metering.

The simplicity of navigation belies a high-performance web service providing assurance of system integrity.
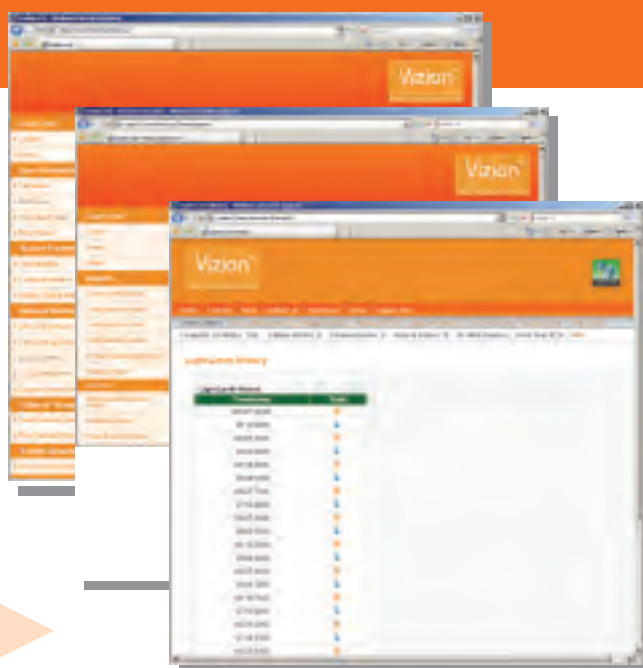
> Allows control of more than 200,000 nodes

> Provides control:
   Activation type (Photocell, Time or Solar Timeclock)
   8 Time Profiles each with 12 events to allow
   multi-stage dimming

> Provides Reports:
   On-screen, pdf, or spreadsheet
   Faults, and predictive faults
   Energy Consumption
   System status
   Inventory

COLLECTOR

> Interoperable product through WiMAC[868] enabled
   Central Management Systems (CMS)

> A transmitting/receiving module that sits within a localised network

> The management interface between Vizion Host and Node

> Two way communication with each Node via WiMAC[868]

> 250 Node capacity within 3km radius

> Scans the network for faults and modifies control regimes according
   to activation type & time profile selected

> Incorporating the Node adoption capability where necessary
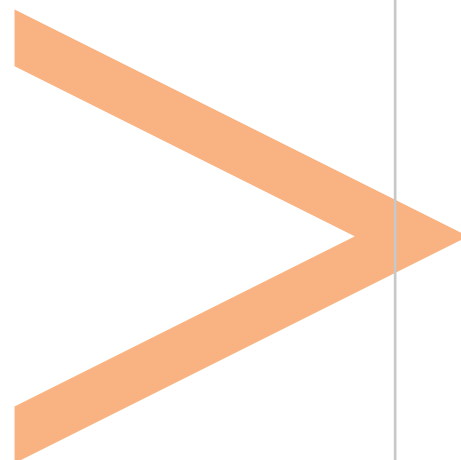
TECHNICAL SUMMARY

|	
Appropriate Fitting fundamentals:	20mm hole, washer & nut seal
Onsite Protection:	Externally sealed enclosure
IP rating:	IP 66 correctly fitted
Enclosure material:	Polycarbonate
Operating temperature range:	-20 - +55°C
Power Supply requirements:	Supplied from Vizion ZEBC Ballast
Server Communications:	Quad band GSM / GPRS, integral antenna
Receiver classification:	Class 2
Device classification:	Class 2
Performance Compliance:	EN300 220 / REC 70-03 Annex1 (g1)
Manufactured:	UK
Dimensions:	Height 145mm, Width 135mm

VIZION TOTAL MANAGEMENT

Control: variable lighting, dynamic switching, activation type

Reporting: lamp faults (Predictive / Actual), supply faults, control gear performance, communication diagnostics, actual energy usage

VARIABLE LIGHTING SOLUTION

Integrating the Ballast Node with the Vizion ZEBC Ballast provides an opportunity to adjust light levels to:

0%   50%   75%   100%
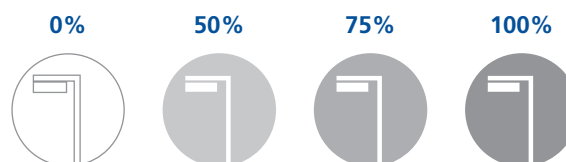
Leading to greater energy and cost savings

Zodion
Street Lighting Controls

Vizion®

Intelligent Street Lighting Management System

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