insight control

Electrical • Monitoring • Automation

CATALOGUE
2020

Smarter Building Solutions

WMS2
Web Management System

VECTOR

ENVI central

nex data management systems

CONFIGURE

CONTROL

CONNECT

Great Solutions - Excellent Service "That's how we do it"

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PRODUCT & SERVICES CATALOGUE

nex data management systems

insight control services

VECTOR

ENVI central

BELIMO

ABB

insight group **insight** control **insight** control services **nex** data management systems

Great Solutions - Excellent Service "That's how we do it"

The aim for Insight Control is to provide our customers with solutions and service when it comes to all things Building Automation, Electrical, Control and Monitoring solutions. From a simple one zone control to full scale BMS and Energy Management System we can supply, install, commission and maintain. Whatever the application big or small the Insight Control Team will be happy to work alongside your team to help deliver our solutions and service on your next project.

Make the Insight Control product line up your preferred controls option today. Insight Control are proud to offer the wide range of control products featured in this catalogue, we offer a diverse range of tried and tested monitoring and control products to suit many applications.

We know and understand how important product knowledge is, to assist with your knowledge in our products we gladly provide product training, documentation, product support and service to your team and customers upon request. Just give us a call or visit our website www.insightcontrol.net.au to find out more about what we can offer you.

Product Sales & Support - 1300 665 831

24/7 Monitored Technical Service and Support Message Line - 1300 799 331

Insight Control Knowledge Base - www.insightcontrol.net.au/knowledge-base

Visit our Sales Office and Showroom:
Unit D3 / 5 Grevillea Place, Brisbane Airport, QLD, 4008 Ph: 1300 665 831 Fax: 1300 665 832
sales@insightcontrol.net.au www.insightcontrol.net.au

Insight Control Products and Services:

- Vector Controls
- WMS2 BMS System
- Zoning Systems
- Variable Speed Drives VSD's
- BMS Project Delivery & Installation
- NEX Data Management Systems
- Energy Demand Control
- Integrated Air Conditioning Solutions
- System Calibration and Servicing
- Energy Monitoring Solutions
- Energy and Systems Audits
- Electrical Contracting Services

Contents

Download the latest product catalogue and datasheets from the Insight Control webpage

Vector Controllers

V-TCX2-40863-OP

V-OPA2-VC

V-OPT1

Vector TCX2 Controller

📄 Data sheet available online

- Versatile controller for all your monitoring and operational needs
- 7 Day programmable schedule
- Easily reprogrammable settings
- Additional LCD terminal available
- Touchscreen LCD option available

BACnet

Modbus

Product Code	Description
V-TCX2-40863-OP	Vector controller with LCD
V-TCX2-14273-230-MOD	Vector Controller MOD
V-OPA2-VC	Wall Mounted LCD terminal
V-OPT1	Touchscreen LCD terminal

V-AEX-MOD

Vector Controller Communication Plugins

- Modbus or BACnet communications module plugins available
- Suitable for a large number of applications
- Supports interfacing with many devices on one network

Product Code	Description
V-AEX-MOD	Modbus communication plug-in
V-AEX-BAC	BACnet communication plug-in

V-AEC-PM1

Vector Controller Memory Plugin

- Memory plugin for the storage and quick transferal of program parameters
- Simple to use, can be used to install program parameters on many controllers quickly and easily
- Pre configured program options, includes USB drive with documentation.
- Custom Programs available on request.

Product Code	Description
V-AEC-PM1	Memory plug-in

Vector Controllers

Vector TCI2 Modbus/Bacnet Controller

V-TCI2-C24

- Compact, functional controller for all smaller monitoring and operational applications
- Various Input Output Options
- Wall mounted or Din rail cabinet mounted
- Easily reprogrammable settings
- 7 Day programmable schedule option
- Modbus / Bacnet Communication Enabled.

Product Code	Description
V-TCI2-C24	Vector Dual Loop Modbus/ Bacnet Controller

Vector TCI Controller's

V-TCI-W22

- Compact, functional controller for all smaller monitoring and operational applications
- Various Input Output Options
- Wall mounted or Din rail cabinet mounted
- Easily reprogrammable settings
- 7 Day programmable schedule option

V-TCI-C24-0

Product Code	Description
V-TCI-W22	Vector TCI controller
V-TCI-C24-0	Vector Dual Loop Controller

Vector Easy Set Program

V-ES

Product Code	Description
V-ES	Easy Set Software
V-ES-CommsCable	Communication Cable

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Vector TCX2 Kits

Vector TCX2-122 Controller Kit

V-TCX2-40863

V-OPA2-VC

V-SDB-TN10-20

Product Code	Description
V-TCX2-40863-OP	Vector controller with LCD
V-OPA2-VC	Wall Mounted LCD terminal
V-SDB-TN10-20	Duct sensor 200mm width 10k

Vector TCX2-311 Controller Kit

V-TCX2-40863

V-OPA2-VC

V-SDB-TN10-20

Product Code	Description
V-TCX2-40863-OP	Vector controller with LCD
V-OPA2-VC	Wall Mounted LCD terminal
V-SDB-TN10-20	Duct sensor 200mm width 10k

Vector TCX2 - Economy Controller Kit

V-TCX2-40863

V-OPA2-VC

V-SDB-TN10-20

Product Code	Description
V-TCX2-40863-OP	Vector controller with LCD
V-OPA2-VC	Wall Mounted LCD terminal
V-SDB-TN10-20	Duct sensor 200mm width 10k
V-SOD-TN10-1	Outdoor Temperature Sensor

Vector TLR Kits

Vector TLR D5P-122 Controller Kit

V-TLR-D5P-122

V-OPU-D5P-122

V-SDB-TN10-20

Product Code	Description
V-TLR-D5P-122	Vector TLR Controller 122
V-OPU-D5P-122	LCD Touchpad 122
V-SDB-TN10-20	Duct sensor 200mm width 10k

Vector TLR D5-311R Controller Kit

V-TLR-D5-311R

V-OPU-D5-311R

V-SDB-TN10-20

Product Code	Description
V-TLR-D5-311R	Vector TLR Controller 311R
V-OPU-D5-311R	LCD Touchpad 311R
V-SDB-TN10-20	Duct sensor 200mm width 10k

Vector TLR D42-311A Controller Kit

V-TLR-D42-311A

V-OPU-D42-311A

V-SDB-TN10-20

Product Code	Description
V-TLR-D42-311A	Vector TLR Controller 311A
V-OPU-D42-311A	LCD Touchpad 311A
V-SDB-TN10-20	Duct sensor 200mm width 10k

Vector Sensors

Vector Indoor Temperature & Humidity Sensors

V-SRA-TN10

- Suitable for various control systems
- 10k Thermistor
- Transmitter selectable 0-10 or 4-20ma

Product Code	Description
V-SRA-TN10	Wall mounted room sensor 10k
V-SRC-T1-*	Wall mounted temperature transmitter
V-SRC-H1-A3	Wall mounted humidity transmitter
V-SRC-H1T1	Wall mounted humidity & temperature sensor

Vector Duct Temperature Sensor

V-SDB-TN10-12

- 10k Thermistor
- Suitable for various control systems
- Transmitter selectable 0-10 or 4-20ma

Product Code	Description
V-SD-Tn10-12	Probe Lead duct Sensor 12cm 10k
V-SDB-TN10-12	Duct sensor 120mm width 10k
V-SDB-TN10-20	Duct sensor 200mm width 10k
V-SDC-T1	Duct temperature Transmitter
V-SDC-H1	Duct Humudity Transmitter
V-SDC-H1T1	Temperature and humidity transmitter

Vector Outdoor Temperature Sensors

V-SOD-Tn10

V-SOC-T1

- 10k Thermistor
- Suitable for various control systems
- Transmitter selectable 0-10 or 4-20ma

Product Code	Description
V-SOD-Tn10	Temperature sensor 10k
V-SOC-T1-1-W0	Temperature Transmitter
V-SOC-H1Tn10-A3	Temperature and Humidity ensor
V-SOC-H1T1-A3-1-W0	Temperature and humidity transmitter -40~ +60 degrees

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Vector Sensors

Vector SDA Differential Pressure Transmitter

V-SDA-P*

- Suitable for various control systems
- Transmitter selectable 0-10 or 4-20ma

Product Code	Description
V-SDA-P1	Diff Pressure transmitter 0-300Pa
V-SDA-P2	Diff Pressure transmitter 0-500Pa
V-SDA-P3	Diff Pressure transmitter 0-1kPa

Vector SDE Differential Pressure Transmitter

V-SDE-P*

- Suitable for various control systems
- Transmitter selectable 0-10 or 4-20ma

Product Code	Description
V-SDE-P1	Diff Pressure transmitter 0-25Pa
V-SDE-P2	Diff Pressure transmitter 0-500Pa

Vector CO2 Sensors

V-SRC-C1

- Air Quality applications
- Outside air control

Product Code	Description
V-SRC-C1	Wall Mounted CO2 transmitter:0-2000 ppm
V-SDC-C1	Duct CO2 transmitter 160mm probe:0-2000ppm

Air Quality Sensors

C-GAS-CO-150

- Range adjustable at time of installation
- Durable plastic housing
- Air quality applications
- Car park monitoring

Product Code	Description
C-GAS-CO-150	Carbon monoxide sensor 0-150ppm
C-HRW-SEN-CO	Carbon monoxide sensor 0-300ppm

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Vector Accessories

Vector Accessories

- 10k thermistor temperature sensor
- For use with TCX2-OP controllers

V-OPC-S

Product Code	Description
V-AMC-2	Conduit Connector:NPT thread
V-AMB-005	Connection Box Surface Mounting
V-OPR-1	Infrared remote controller
V-OPC-S	Integrated display & programing unit
V-OPA-S	Remote display & prog interface

TA3 Thermostat

- Mechanical thermostat
- Allows for temperature setting between 5 and 30 degrees celsius
- Minimalist design with clean white finish to suit any room

C-HRW-TA3

Product Code	Description
C-HRW-TA3	Mechanical room thermostat

Push Our Buttons Training Sessions **VECTOR**

Call us about our next training session dates..

1300 665 831 or email
training@insightcontrol.net.au

- Vector Product Overview
- Programming Basics
- Control PID Tuning
- WMS1 BMS Preview
- Tech Install Tips

Lunch Provided

Location: Insight Control Office

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Planning your next project?

Call us for a wider range of project specific sensors and monitoring equipment. Our friendly staff will be happy to help you, as well as provide pricing and availability on a range of additional ancillary products.
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ABB Variable Speed Drive

ABB Variable Speed Drive

📄 Data sheet available online

• Wide range of applications
• Removable LED keyboard included
• Automatic voltage regulation
• Modbus communication and IP54 as standard

ABB

ABB ACH580

Product Code	Description
VSD-ABB-0.75KW	ABB ACH580-0.75KW IP55
VSD-ABB-1.1KW	ABB ACH580-1.1KW IP55
VSD-ABB-1.5KW	ABB ACH580-1.5KW IP55
VSD-ABB-2.2KW	ABB ACH580-2.2KW IP55
VSD-ABB-3KW	ABB ACH580-3KW IP55
VSD-ABB-4KW	ABB ACH580-4KW IP55
VSD-ABB-5.5KW	ABB ACH580-5.5KW IP55
VSD-ABB-7.5KW	ABB ACH580-7.5KW IP55
VSD-ABB-11KW	ABB ACH580-11KW IP55
VSD-ABB-15KW	ABB ACH580-15KW IP55
VSD-ABB-18.5KW	ABB ACH580-18.5KW IP55
VSD-ABB-22KW	ABB ACH580-22KW IP55
VSD-ABB-30KW	ABB ACH580-30KW IP55
VSD-ABB-37KW	ABB ACH580-37KW IP55
VSD-ABB-45KW	ABB ACH580-45KW IP55
VSD-ABB-55KW	ABB ACH580-55KW IP55
VSD-ABB-75KW	ABB ACH580-75KW IP55

ABB

# Building Management System

Web Management System

C-HRW-WMS2

📄 Data sheet available online

- Extremely compact, standalone, embedded web-based interface.
- For use with building automation and process/access control systems.
- Can be supplied programmed and engineered to meet your particular needs.
- BACnet IP, BACnet MS/TP, Modbus/TCP, Modbus RTU/485, LonWorks.

Product Code	Description
C-WMS2-Web HMI	Web Management System (pictured)
C-WMS2-Modbus Only	WMS2-MR Modbus only Version
C-WMS-MR-485	Modbus RTU / RS485 - USB Interface
C-WMS-BN	BACnet MSTP - USB Interface
C-HRW-WMS2-LN	LonWorks twisted pair - USB Interface
P-Engineering	Programmed to your particular needs
CH-ENVI Central	ENVI Central 7" Touch Screen

Building Management System
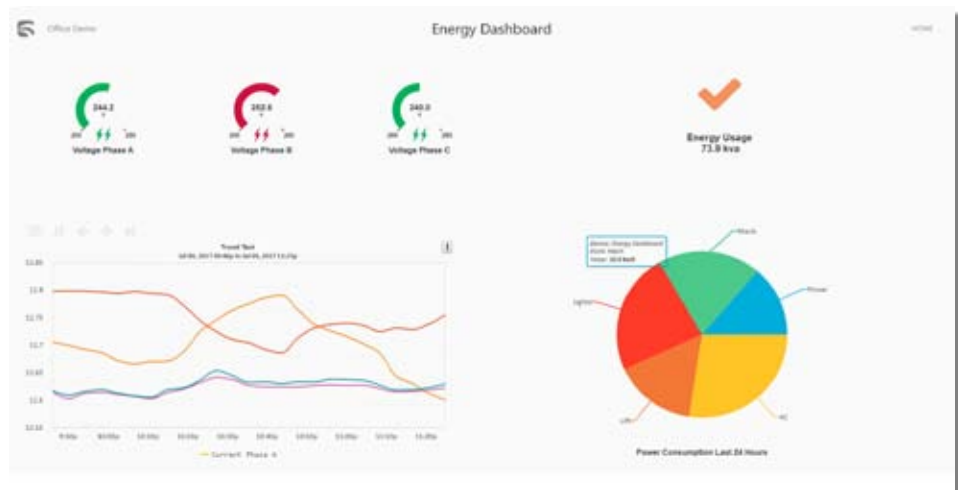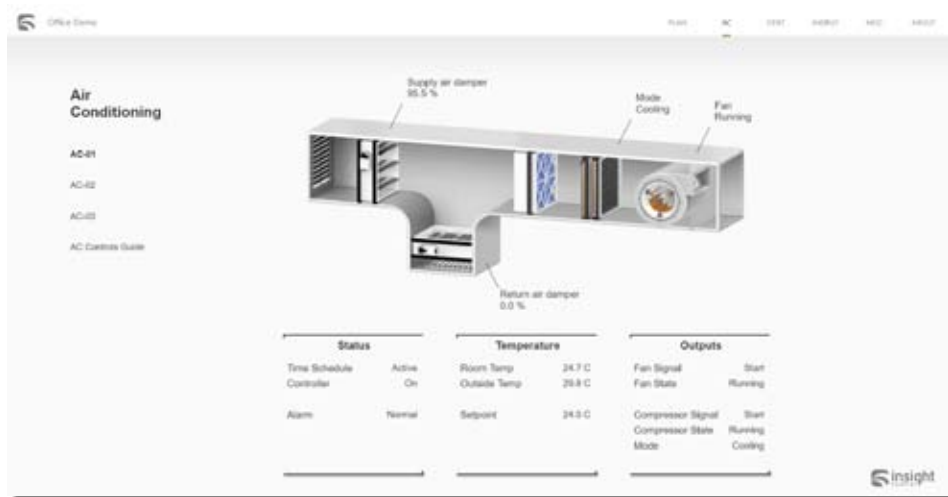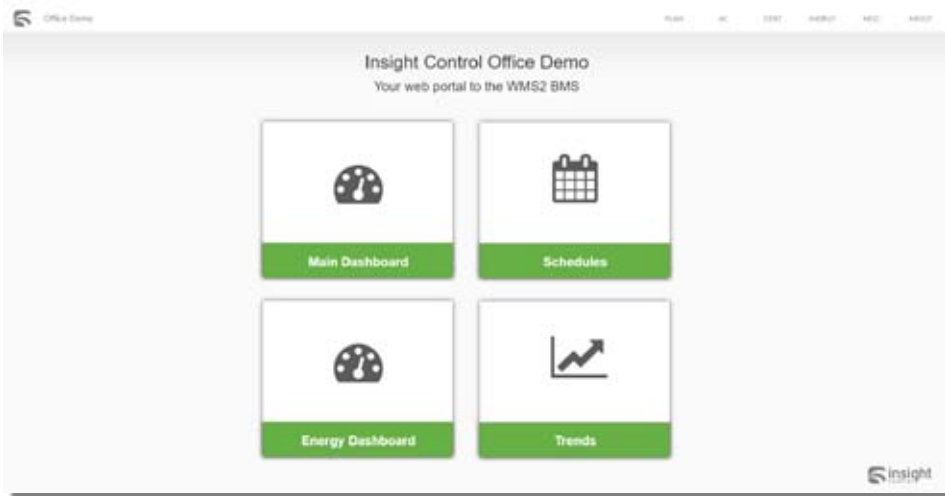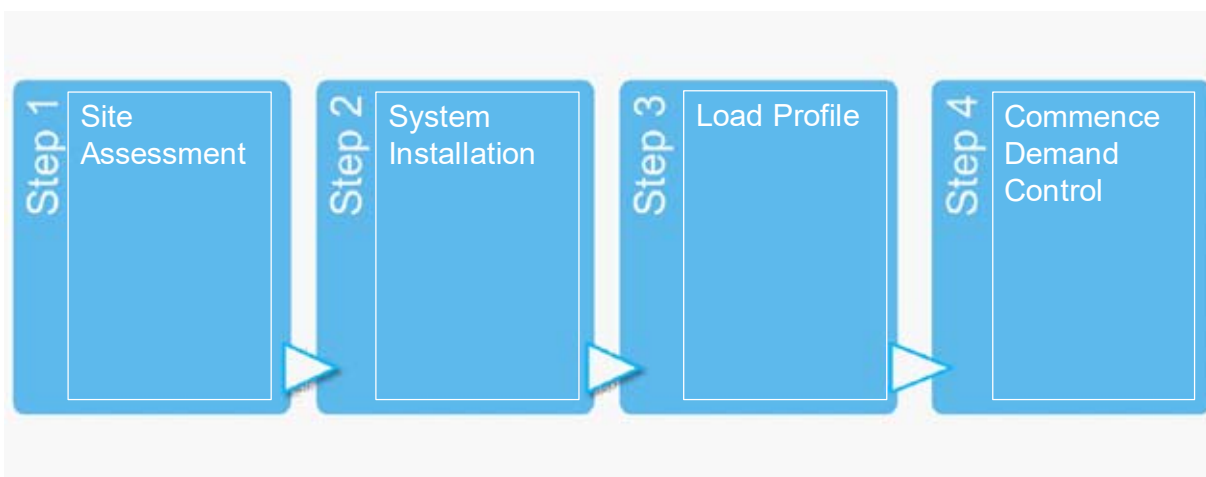
Energy Demand Control System

Energy Demand Control

- Automatic Load Shed Control
- Energy Monitoring
- Temperature Monitoring (Store & Cold / Freezer Rooms)
- Time Schedule Equipment Shutdown after hours
- Fail Safe Control, High Temp override
- Battery & Solar integration possible
- New build or retro fit installation
- NEX Cloud connection for system trend reporting and email alerts

C-HRW-WMS2

Typical EDC System will require the following, this can change depending on the project.

Product Code	Description
C-WMS2-Web HMI	Web Management System (pictured)
V-TCX2-40863-OP	Vector controller with LCD
M-SPM93	Electrical meter, kWh, 3 Phase 60A C1
M-SCT36-200/5	CT Split Core 200/5amp
M-NEX	12Months NEX Cloud Subscription
P-Engineering	Programmed to your particular needs

EDC System Implementation Process

Step 1	Site Assessment	Step 2	System Installation	Step 3	Load Profile	Step 4	Commence Demand Control

Energy Demand Control System

EDC Dashboard

NEX Data

Load Shed Control = 20% Reduction

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ENVI Central

## Universal HVAC Central Control Interface

CH-SZ-NAV

V-TCX2-40863-OP

- Intuitive easy to use Web Interface.
- Compatible with most Commercial AC systems
- Manage single or multiple AC systems from one interface
- System Fault Reporting
- System Time Scheduling
- Low cost remote management solution for unlimited sites
- Easy new or retro fit installation
- Future NEX Cloud connection for system trend reporting and email alerts

Product Code	Description
CH-ENVI-MPM	ENVI Web Interface MPM
CH-SZ-NAV	Climate Hub Navigator
V-TCX2-40863-OP	Vector controller with LCD
CH-ENVI Central	ENVI Central 7" Touch Screen
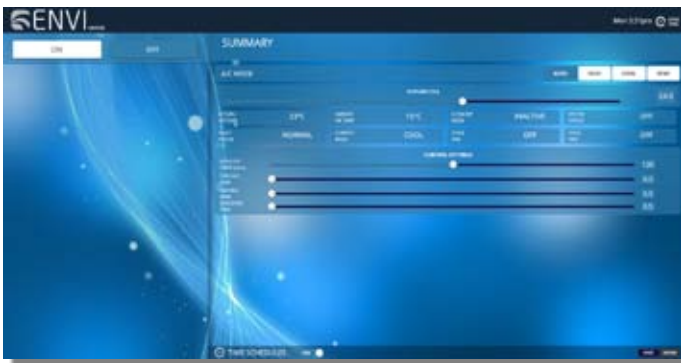
Climate Hub

### Climate Hub Zoning Components (New Install)

CH-SZ-NAV

- Variable Air Volume (VAV) zoning system
- Up to 12 zones
- Amazing Looking Capacitive Touchpads available in White or Black
- Intuitive Easy to Use Web Interface
- Compatible with the Vector TCX2 range of HVAC controllers
- Intuitive Easy to Use Web Interface
- Access Zoning Control from PC/Tablet/Mobile Phone
- Manage Multiple Systems

CH-SZ-RC

Product Code	Description
CH-SZB-4-RAIL	4 Zone ClimateHub with MPM 1-4 Zone & Chatter Box
CH-SZB-8-RAIL	8 Zone ClimateHub with MPM 1-8 Zone & Chatter Box
CH-SZB-12-RAIL	12 Zone ClimateHub with MPM 1-12 Zone & Chatter Box
CH-SZ-NAV	Climate Hub Navigator
CH-SZ-RC	Climate Hub Smart Room Sensor
C-DS-47K-TL	Duct Temperature Sensor
CH-ENVI Central	ENVI Central 10" Touch Screen
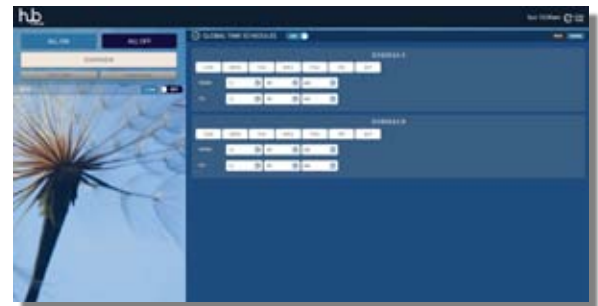
Climate Hub Zoning (Smartzone Replacement / Upgrade)

Product Code	Description
CH-SZ-MPM1-4	Climate Hub MPM 1-4 Zone
CH-SZ-EXP-8	Climate Hub Expansion 5-8 Zone
CH-SZ-EXP-12	Climate Hub Expansion 9-12 Zone
CH-SZ-NAV	Climate Hub Navigator
CH-SZ-RC	Climate Hub Smart Room Sensor
C-DS-47K-TL	Duct Temperature Sensor

Climate Hub Web Module Access (Optional Upgrade)

- Intuitive Easy to Use Web Interface
- Access Zoning Control from PC/Tablet/Mobile Phone
- Manage Multiple Systems

Product Code	Description
CH-Chatterbox	Chatterbox Web Interface
CH-ENVI Central	ENVI Central 7" Touch Screen

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NEX Data Management

NEX Gateway Module

M-DMS3

📄 Data sheet available online

- Data management system for building meters, sensors and devices
- Subscription free software
- Automatic email alerts
- Single or multiple sites handled
- Access data anywhere on the web

Product Code	Description
M-DMS3	NEX Gateway Module

NEX Portable Monitoring

M-PM

📄 Data sheet available online

- ROI Calculations
- Energy Service and Upgrade Assessments
- Temperature Profiling
- Compliance Testing
- Building Performance reporting
- Before and After Reporting

Product Code	Description
M-PM	NEX Portable Monitoring Box

nex
M-NEX-DATA-3G

- Additional data plan available for sites without easy access to the web
- 500MB monthly allowance for your device's communication to the cloud

Product Code	Description
M-NEX-DATA-3G	3G modem and 12month internet plan

NEX IO Universal Expansion Modules

M-TCX2

- Expansion modules to increase the number of inputs and outputs handled by the Gateway Module
- Used for more temperature, gas, water and energy monitoring
- High flexibility

Product Code	Description
M-TCX2	IO Expansion module 8UI

NEX Energy Monitoring

Energy Meters

- High durability
- Low cost solutions
- Class value denoted as C#
- Modbus Comms

M-SPM

Product Code	Description
M-SPM91	Electrical meter, kWh, 1 Phase 5A C0.5
M-SPM93	Electrical meter, kWh, 3 Phase 60A C1

Compatible Current Transformers:

M-CT1/60

M-SCT

Product Code	Description
M-CT1/60	Current Transformer 5/60-150A C1
M-CT2/200	Current Transformer 5/200-500A C1
M-CTD-5S	Split Core Current Transformer C1
M-SCT24-100/5	CT Split Core 100/5amp
M-SCT36-200/5	CT Split Core 200/5amp
M-SCT24-300/5	CT Split Core 300/5amp
M-SCT24-400/5	CT Split Core 400/5amp

Energy Meters Multi-Channel

- Meters for measuring up to 30 single phase circuits or 10 three phase circuits
- Small and compact DIN rail mount design
- Clip-on split or solid core current transducers
- Power supply of 220v
- Modbus Comms

M-NEM30

Product Code	Description
M-NEM30	10x3Phase /30x1Phase multi circuit
M-SPM20-C CT	SPM20 CT 63A solid core
M-SPM20-O CT	SPM20 CT 50A clip on

Single Zone VAV Control

Zone-It Single Zone VAV Control

C-ZoneIt

C-LS-47K-TL

E-TFORM-4

Single zone 24VAC VAV control system suitable for any application with a central source for cooling and heating such as reverse cycle systems. Not for use in applications utilising zone reheat. Features LED zone status indication and InnoCab plug-in connection to damper motor.

Suitable for duct-mounted VCDs or inline dampers.

Kit includes:
- 1 x Wall mounted control panel with room sensor and supply air sensor
- 1 x 47k supply lead sensor
- 1 x 240V/24V transformer

Product Code	Description
C-ZoneIt	Zone It VAV Wall Controller
C-LS-47K	Bead on a lead sensor 1m 47k
E-TFORM24AV	24V Ac Transformer 44VA

Vector TRI2 Digital Single Zone VAV

V-TRI2

C-LS-10K-TL

E-TFORM-4

Product Code	Description
V-TRI2	TRI2 Wall Controller
C-LS-10K	Bead on a lead sensor 3m 10k
E-TFORM24AV	24V Ac Transformer 44VA

Features

- Big LCD Display.
- Easy to Setup and Install.
- Digital Input signal for Presence Sensor.
- Integrated Sensor for accurate room Temprature sensing.
- CO2 sensor Input.
- Boost Function to allow maximum conditioning.
- Minimum Ventilation Functionality.
- BMS Integration possible via Modbus communication.
- ECO mode for Energy Saving.

Single Zone VAV Control

D-MDB

Belimo Motorised Damper Barrels

- 24V drive-open, drive-close damper actuators
- Size is given as a diameter width
- Heavier load damper actuators available - contact us for details

Product Code	Description
D-MDB-150-IC	150mm 5Nm 24V motorised damper
D-MDB-200-IC	200mm 5Nm 24V motorised damper
D-MDB-250-IC	250mm 5Nm 24V motorised damper
D-MDB-300-IC	300mm 5Nm 24V motorised damper
D-MDB-350-IC	350mm 5Nm 24V motorised damper
D-MDB-400-IC	400mm 5Nm 24V motorised damper

Zone It

Vector TRI2

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Cabling and Switches

Cable Accessories

E-CAB-12

E-CAB-4CS-GREY

Product Code	Description
E-TFORM-4/8	240 - 24VAC transformer plug pack 24VA
E-CAB-S-200	IC cable 5 cores + 1 shield 200m (grey)
E-CAB12	IC cable 6 core flat 12m (blue)
E-PLUG-20	6P6C Inno-cab plugs - bag QTY 20
E-TOOL	Innocab crimping tool
E-CAB-2CS-GREY	2 core screened 7020 data cable 100m
E-CAB-4CS-GREY	4 core screened 7020 data cable 100m
E-CAB-485	485 Cable

Switches

C-HRW-APS-LEF00

C-CS

- Applications in MSSB, control and monitoring solutions
- High quality products from trusted brands
- Adjustable to suit your application
- Call us for a wider range of switches to suit your project

Product Code	Description
C-HRW-APS-LEF00	Air press switch 30-300pa
C-HPT 55 DUCT MOUNT	Heater protection thermostat main
C-REL-24V SL	Slim line relay 24V
C-REL-240V SL	Slim line relay 240V
C-CS	Current Switch 1-200A ac

Need a MSSB or Control Panel Built?

Insight Control offer a complete MSSB and control panel manufacturing service from design to delivery, big or small.

Our in house workshop is setup to deliver high quality MSSB and control panels to meet your project requirements.

Call us for your next project.

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Belimo Dampers and Motors

D-MDB-250-IC

Belimo Motorised Damper Barrels

- 24V drive-open, drive-close damper actuators
- Size is given as a diameter width
- Heavier load damper actuators available - contact us for details

Product Code	Description
D-MDB-150-IC	150mm 5Nm 24V motorised damper
D-MDB-200-IC	200mm 5Nm 24V motorised damper
D-MDB-250-IC	250mm 5Nm 24V motorised damper
D-MDB-300-IC	300mm 5Nm 24V motorised damper
D-MDB-350-IC	350mm 5Nm 24V motorised damper
D-MDB-400-IC	400mm 5Nm 24V motorised damper

D-ACT-LMS-24

Belimo Motors

- Built to last products from a renowned name in the industry
- Available standalone or attached to damper barrels
- Auxilary connections and different drive types available

Product Code	Description
D-ACT-LMS-24	5nm 24V drive open/drive close 150s
D-ACT-LMA-230	5nm 240V drive open/drive close 150s
D-ACT-LMA24SR	5nm 24V Modulating 2-10V

P-MISC ELEC

Belimo Water Valves

- Built to last products from a renowned name in the industry
- For use in water control and modulation
- Ask us for price and availability on a wide range of project specific water valves

Product Code	Description
P-MISC CTRL	Project specific water valves

Services We Provide

CO Sensor / Essential Services Maintenance

Insight Control Services offer a test & calibration service for Carbon Monoxide (CO) sensors as part of the essential services maintenance. Once a building is constructed the owner is responsible for the upkeep and maintenance as part of the Australian Standards AS 1851-2012 (Routine services of fire protection systems and equipment).

The following tasks are carried out during a CO sensor control maintenance service.

- Test & calibrate CO sensors.
- Visual check of control panel wiring.
- Check controller operation.
- Visual inspection of field devices and sensors.
- Check VSD (if fitted).
- Check Time clock (if fitted) is operation.
- Label sensors with test date tag.
- Provide service report
- Provide onsite log book for records.

PRIMARY REQUIREMENTS

A CO control monitoring system installed to regulate mechanical ventilation serving a garage, parking station or other enclosure used for servicing or operation of motor vehicles shall require the following standards.

- Be provided with a digital display.
- Operate continuously and effectively whenever motor vehicles are present in the enclosure in accordance with Clause 7.13.3
- Under any fault condition automatically activate an alarm and operate the mechanical ventilation in the enclosure in accordance with Clause 7.13.6
- Be clearly marked to indicate servicing and calibration requirements in accordance with Clause 7.13.7
- The system must also provide at least 1 air change in every 24 h period.
- No point in the car park can be more than 25m away from a sensor.
- The systems must be serviced twice – yearly.

If you require a Car Park test & calibration service, Insight Control Services can help, please contact us

Services We Provide

BMS & DDC Control Programmed Maintenance / Service

Insight Control Services also offers Programmed Maintenance and Services for your Building Management System & DDC controls to make sure that all aspects of your building are running to maximum efficiency. A detailed service report is also provided after each service highlighting all the key observations made by our technician.

The following work is completed during a standard Bi-Annual BMS & DDC system site visit service:

• Check digital control system points for correct operation

• Check Sensor calibration adjust as required

• Check Monitoring Reporting Sohware

• Check DDC Control Hardware

• Visual Check of control panel wiring

• Visual inspection of field devices and sensors

• Keep all areas clean and tidy

• Check damper actuator operation

• Program enhancements on request

• Carry out minor program changes on request

• Top up 4G pre paid data as required

• Complete service log book

• Provide service reports
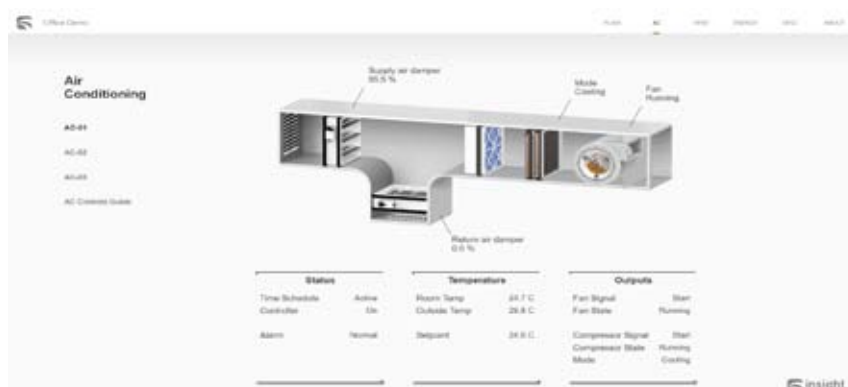
Terms and Conditions of Sale

Terms and Conditions of Sale

INSIGHT CONTROL (ABN 77 135 190 779)

1. GENERAL - These conditions of sale apply to any sale of items or equipment of the Company or, where a quotation is made, they shall form part of that quotation.

2. PRECEDENCE - In the event of conflict between these conditions and those which may be included in, or implied by, any document forming part of any inquiry, specification, order or contract then these conditions shall prevail except in so far as they are expressly varied by the Company in writing. If any condition is contrary to or excluded by law these conditions shall be modified but only to the extent of excluding that part of the conditions affected.

3. ACCEPTANCE - A quotation is not to be construed as an offer or obligation to sell and the Company reserves the right to accept or reject any order received.

4. PRICES a) All prices are subject to change without notice and orders are accepted by the Company on the condition that they will be invoiced at the prices ruling at the date of despatch. All prices are strictly net unless otherwise stated.

b) Every endeavour will be made to give 30 days notice of any increase.

c) All retail prices shown in published catalogues or price lists are recommended selling prices only and there is no obligation on the part of the reseller to maintain such prices.

d) A quotation includes only such goods as are specified therein. The Company reserves the right to cancel any sale where goods offered ex stock have been previously sold or otherwise committed.

5. FREIGHT a) Unless otherwise stated goods are despatched on a Free on Transport (FOT) basis. The Purchaser shall nominate the preferred freight method and be responsible for all freight charges. Where the Purchaser requires freight to be prepaid, all expenses will be to his account at cost.
b) Freight cost on return of any goods which are not in accordance with the Purchaser's order will only be paid by the Company if returned by the Company's nominated transport.

6. SALES TAX - The prices quoted do not include sales tax unless specifically stated.

7. TERMS OF PAYMENT - Settlement is strictly 30 days from end of month of purchase. If the Purchaser's account exceeds the Company's terms the Purchaser's orders will be held pending payment, and once over 90 days, the Purchaser's account will be placed on a COD basis.

8. DELIVERY - The delivery period quoted commences from the date the Company receives sufficient information to proceed with supply or from the date the company receives the Purchaser's written order, whichever is the later date. Quoted delivery dates are subject to confirmation when placing the order. Unless otherwise agreed by the Company in writing, the Company shall not in any event be liable to the Purchaser for any delay in the delivery or any nondelivery of the goods or any part of them.

9. CREDITS - Goods will not be accepted for credit without prior approval of personnel at the Company's Sales Office. All goods approved for return shall be returned freight prepaid and subject to a 15% restocking charge.

10. CANCELLATION OR VARIATION - An order may, at the Company's option, be terminated in the event of insolvency of the Purchaser or of execution being levied against any of the goods of the Purchaser or of the Purchaser being placed in liquidation, whether voluntarily or otherwise or of a mortgagee entering into possession of any assets of the Purchaser. An order may be varied only if such variation is accepted by the Company in writing. A variation or cancellation by the Purchaser is subject to agreement by the Company and in any event is subject to the Company being indemnified by the Purchaser against any loss or damage.

11. PURCHASER'S SPECIFICATIONS - The Company shall not be deemed to have agreed to comply with any specifications and drawings referred to in any order unless such specifications and drawings have been produced to the Company prior to the delivery of goods and are signed by the Company.

12. VALIDITY - Unless otherwise stated quotations are open for acceptance for a period of 30 days from the date of quotation and thereafter are subject to confirmation acceptance. If on acceptance of a quotation the delivery date exceeds a period of 60 clear days then the Company may amend the quotation. Furthermore in the event of alterations to design or specifications all quotations given are subject to withdrawal or variation at any time prior to acceptance. Unless confirmed in writing by the Company any verbal agreement to vary undertakings, assurances or understandings relevant to the quotation shall not be binding.

13. INSPECTION - The Purchaser shall inspect the products delivered on their arrival. If the Purchaser considers that the products are not in accordance with the contract, written notice must be given to the Company within 7 clear days and if no notice is received by the Company within that time the products are deemed to be in all respects in accordance with the contract.

14. PACKING - Unless stated otherwise in the quotation the price quoted includes packing in accordance with the Company's standard practice. Any other packing requested by the Purchaser or deemed necessary by the Company will be charged in addition to the price quoted.

15. DAMAGE OR LOSS IN TRANSIT - Where carriage is the responsibility of the Company, the Company will repair or may replace free of charge contract goods lost or damaged in transit to the contractual point of delivery provided written notice of such loss or damage is given to the Company within 3 days of delivery or expected delivery, or within such times as will enable that Company to comply with the carrier's conditions of carriage affecting loss or damage in transit.

16. RISK - The goods shall be at the risk of the Purchaser from the time of delivery to the Purchaser's store (where carriage is the responsibility of the Company) or otherwise from the time of their delivery to the Purchaser or its carrier.

17. PRODUCT DESIGN - The Company engages in a policy of continuous development and improvement of its products. Therefore the Company reserves the right to alter the design and/or specifications of any product or equipment without notice and without incurring liability.

18. WARRANTY - All goods which are the Company's own are guaranteed against faulty workmanship, materials or design, for a period of 12 months from the date of despatch, after which all liability on the part of the Company ceases. The warranty is a Return to Base

warranty that requires the Purchaser to return any goods to the place of purchase for any Warranty credit approval. The guarantee does not apply in the following cases:

a) defect arising from materials supplied by the Purchaser or from a design requested by the Purchaser;
b) replacements or repairs resulting from normal wear of units and machinery, corrosive atmosphere, damage or injury caused by lack of care, insufficient inspection or maintenance or improper use of the goods;
c) failure attributable to fortuitous circumstances or "force majeure"
The guarantee consists of repairing, modifying or replacing the parts or units recognised as defective within the shortest time at the Company's premises and at the Company's expense, inclusive of parts and labour, but exclusive of transport and/or travelling expense. Subject to the above, the Company's liability and that of its resellers is wholly limited to the original cost of the product sold. Any unauthorised repairs or alterations to the equipment shall invalidate this warranty.
In the case of goods not of the manufacture of the Company or its principals, the Company undertakes that it will, if requested in writing by the Purchaser, make all reasonable endeavours in assisting the Purchaser to obtain from the manufacturer the benefit of any guarantee or warranty which the manufacturer may have expressly given as to the quality or fitness for any purpose of the goods, except as may otherwise be provided for by law.
The fulfilment of this undertaking shall constitute the Company's sole liability in respect of any faulty goods not of the manufacture of the Company or its principals.
Neither the reseller nor the Company shall be liable for any injury, damages, expenses, or loss of profit, direct or consequential, arising out of the use or installation of products supplied by the Company all of which are supplied at the sole risk of the user.
This warranty is in addition to any statutory warranty which a Purchaser cannot waive but all other warranties are waived by the Purchaser.

19. DEFAULT OF PURCHASER - If the Purchaser defaults in the due observance or performance of any or all of his obligations under any contract arising out of this offer or being a company takes or shall have taken against it any action for the winding up of the Company or the placing of the Company under official management or receivership, or if a mortgagee of the Purchaser takes possession of any of the Purchaser's assets or being an individual the Purchaser petitions for his bankruptcy or seeks to assign his estate for the benefit of his creditors then the Company without prejudice to any other rights or remedies open to it may; a) determine the contract and/or suspend manufacture or delivery, installation, commissioning or testing of any goods then outstanding;
b) retain any security given or money paid by the Purchaser or available through enforcement of guarantee or security bonds lodged and apply this against the loss and damages incurred by it in the performance of the contract;
c) take such steps as it may deem necessary to mitigate the damage suffered including the putting to use, hiring out, sale or disposal of any goods supplied, or to be supplied under the contract and in its possession;
d) exercise its rights under Clause 20.

20. RETENTION OF TITLE a) The full legal and equitable title in the goods to be supplied to the Purchaser (whether such goods are transported by the Company to the Purchaser or are collected by the Purchaser from the Company's premises) is retained by the Company until payment is made in full for the goods. Until the moment of full payment of what the Purchaser owes the Company for the goods the Purchaser shall keep the goods for and on behalf of the Company in the Company's capacity as fiduciary owner.

b) In respect of goods not paid for in full the Company authorises the Purchaser to sell the goods as the Company's fiduciary agent for the account of the Company only. The proceeds of the sale are the property of the Company and the Purchaser shall hold such proceeds for and on behalf of the Company in a fiduciary capacity. The Purchaser shall pay such proceeds of sale into a separate account for the Company and keep separate records as to such goods sold and the amount received.

c) In respect of goods not paid for in full the Purchaser shall ensure that such goods are stored in such a way that they are clearly identifiable as property of the Company and are not intermingled with the property of the Purchaser or any other person. The Purchaser shall not in any way alter or treat such goods so as to change their quality or nature in any way.

d) The Purchaser shall notify the Company in writing of any intended sale of the Purchaser's business which includes or purports to include goods not paid for in full as part of the Purchaser's stock.

e) Payment of what the Purchaser owes the Company for goods shall be deemed to have been made when cheques for the price have been met and honoured in full and there is no possible recourse by any liquidator of the Purchaser in respect of such payment.

f) While the Company retains full and equitable title in the goods the Purchaser shall not bail, pledge, mortgage, charge, obtain or grant a lien over, lease or assign by any other way, any security in the goods. Only sales pursuant to sub-clause (b) hereof are allowed.

g) The Company agrees that for the time being the Purchaser may retain possession of goods which have not been paid for in full but should the specified period expire under normal trading terms before payment of the goods is completed by full honoured cheque(s) or cash or, should any event detailed in Clause 20 above occur, then the Company and its agents and employees have the right to enter any premises in which the goods are stored and take possession of any of the goods in addition to any deficiency in the sale price after paying the costs of recovery and crediting goods recovered by the Company.

21. EXPORT SALES a) Terms of payment:- All prices quoted are in Australian Dollars unless specified to the contrary. Payment is by cash prior to despatch, or at sight by irrevocable confirmed letter of credit. Confirmation costs to be borne by the opener.

b) Freight:- Prices are ex works Brisbane, Queensland. Transport costs are to international departure point, either sea or air, and are additional charges to export prices.

c) Insurance:- As a service, this can be arranged for the Purchaser but at its cost.

22. Any contract for the sale of goods by the Company to the Purchaser shall be governed by the law of the State of Queensland and the Purchaser submits to the nonexclusive jurisdiction of its courts.

23. Any notice, consent or other communication hereunder may be by facsimile and will be deemed to have been received on the next business day after transmission.

PRODUCT DATASHEETS

Visit our website for more information
www.insightcontrol.net.au

Vector TCX2 Controller Datasheet

The TCX2 is a programmable universal controller with high level communications capabilities. Each of the 4 control loops may use a P+I sequence, 6 binary stages, 8 universal inputs, and 3 analogue outputs.

FEATURES

Onboard interface with backlit LCD.

Optional remote wall mounted LCD touchpad.

BACnet and Modbus plugin communication options.

Economy mode based on enthalpy or temperature.

Free EasySet programming software.

CO_2 control with economy damper override function.

CO control for car park applications.

Humidity control with set point shift function.

Complete turnkey solutions available including programming and installation.

Service and support available. Contact us for options and pricing.

SUPPORTED PROTOCOLS

Easyset

EasySet is a fast, free, and user friendly way to access and configure Vector TCX2, TCI2, and SDX2 controllers for any application.

FEATURES

Smart wizards for quick and easy programming.

Design, save, and share your program files.

Windows 7, 8, and 10 compatible.

Preset sensor options.

Connect easily with a USB programming cable.

Live data trends with CSV export.

Free software with online updates.

Sensor calibration feature.

Complete turnkey solutions available including programming and installation.

Service and support available. Contact us for options and pricing.

Step 1
Download

Download
and install EasySet

Step 2
Connect

Connect your
TCX2 to a USB port

Step 3
Open

Run EasySet
and open a template file

Step 4
Configure

Configure your
next project solution
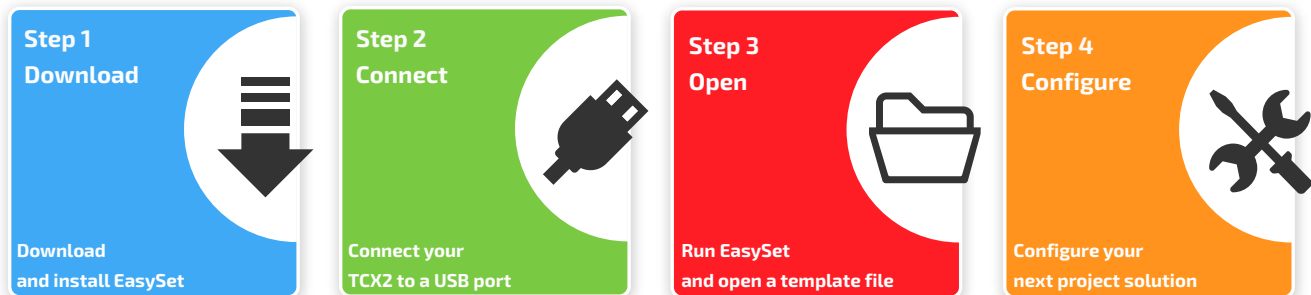
Vector TLR Series Controller Datasheet

The TLR series controllers are an out of the box solution suitable for use on HVAC systems, available in several configurations to suit your requirements. The TLR series are simple to install, and easily applicable to the following control strategies:

APPLICATIONS

- DX plant with reverse cycle

- DX plant with electric heating

- Water cooled reverse cycle with pump call

- Water cooled electric heat with pump call

- Chilled water modulating cooling (D42-311A model)

- Staged electric heat (D5P-122 model)

- 2 stage reverse cycle (D5P-122 model)

- 3 speed fan control (D42 -311A and D5-311R model)

- Master - Slave option, one terminal can drive up to 8 base units in parallel

FEATURES

- Multiple configuration types available

- 7 day timeclock standard

- Energy saving features

- Cost saving option with economy functionality and set point limitation

- Designed in Switzerland

- Blackbox retrofit control option, like for like wiring

- Relay switching up to 10(6) A

- LCD Display Touchpad with backlight and inbuilt temperature sensor

Technical Specifications			Vector TLR
Power Supply	Operating Voltage	Voltage	230VAC ± 10%
		Frequency	50/60 Hz
		Power Consumption	Max 5VA
		Electrical Connection	Terminal connectors, 0.34 to 2.5mm^2 wire
Communication	Base	Type	Digital: peer to peer
		Cable type	Copper wire 0.8 to 2.5mm^2, shielded twiste pair
Environment	Operation	Climatic Conditions	To IEC 721-3-3 class 3K5
		Temperature	0 - 50 °C
		Humidity	up to 95 %, RH non-condensing
	Transport	Climatic Conditions	To IEC 721-3-2 and 721-3-1, class 3K3 and 1K3
		Temperature	-25 - 70 °C
		Humidty	up to 95%, RH non-condensing
		Mechanical Conditions	Class 2M2
Standards	Conformity	EMC Directive	2004/108/EC
		Low voltage directive	2006/95/EC
		Automatic electrical control for households	EN 60730-1
		Special requirement on temperature dependant controls	EN 60730-2-9
General		Safety Class	II (IEC 60536)
		Degree of Protection	IP20 to EN 60529
		Material	PC + ABS Plastic (UL94 class V-0)
		Dimensons	57 x 147 x 115 mm

Blackbox to TLR Changeover Guide		
Existing Controller	Functionality	Replacement Solution
Blackbox 122	1 fan, 2 stage heating and cooling with reverse cycle or electric heat relay outputs	**TLR-D5P-122**
Blackbox 311	3 speed fan control with relay heating and cooling outputs (Relay)	**TLR-D5-311R**
Blackbox 311	3 speed fan control with analogue / ramped heating and cooling outputs (Analogue)	**TLR-D42-311A**

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insightcontrol.net.au

Web Management System Datasheet

The WMS2 is a stand-alone, web-based,
graphical Building & Energy Management System.

FEATURES

HTML5 web server, no dedicated PC or web browser plugins required.

Supports multiple simultaneous communications protocols.

Fully customisable HMI graphics.

WiFi access point.

Trend data points and download CSV files.

Time scheduling with sunrise, sunset, and staggered start.

Alarm monitoring with live email alerts.

Runtime accumulation with email alerts.

Multiple simultaneous users and permissions.

Activity log for tracking important actions.

Complete turnkey solutions available including installation and support.

Secure remote support options available.

The WMS2 is supplied programmed and engineered to meet your particular needs. It is a perfect complement to the Vector TCX2 control system and can be retrofitted to existing installations.

SUPPORTED PROTOCOLS

ASHRAE **BACnet**™

Modbus

Product Code			C-HRW-WMS2
Environmental	Operation	Temperature Range	-40 to +85 °C Fanless
Electrical	Power Supply	Supply Voltage	5VDC
		Current	1.5 A
		Connection Type	USB Micro B
Communications	Ports	Ethernet	1 x 10/100
		USB	4 x USB 2.0 compatible OHCI ports
	Protocols	Ethernet (included)	BACnet IP, Modbus/TCP
		USB (not included)	BACnet MS/TP, Modbus RTU/485, LonWorks
Timeclock			Battery backed real time clock
Hardware		Dimensions	105 (L) x 75 (W) x 38 (H)
		Compliance	RoHS, FCC, and CE

OPTIONAL INTERFACES

BN-MSTP: BACnet MS/TP interface
MR-485:   Modbus/485 interface
            (isolated)
LN-FT: Lon interface (twisted pair)
LN-PL: Lon interface (powerline)
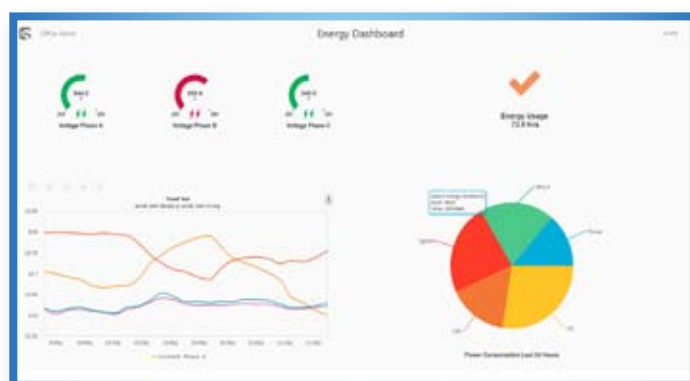

REQUIREMENTS

No software is required other than a modern
web browser.

REMOTE SUPPORT

Insight Control offer secure remote support
options for WSM2 installations.

Contact us for options and pricing.

NEX CLOUD COMPATIBLE

Monitor and trend your site's data with
the NEX Cloud. Unlimited historical data,
powerful reporting, accessible all of your sites
anywhere online.

Climate Hub VAV Zoning Datasheet

The Climate HUB SZT series product is the worlds most advanced plug & play climate control system. With the ability to have uto 12 Zones per system, Climate HUB SZT is the marquee product in the HUB climate range and incorporates the Home HUB smart device gateway. The Home HUB gateway streams information to other Home HUB devices and to your computer, Ipad, android or iPhone. Other Home HUB features such as mothership, sightglass and cloud cover are also part of the SZT series product platform.

Features

- Smart Device Connectivity
- Capacitive Touch Touchpads
- Temperature Setpoint in every room
- Dynamic Energy Recovery
- Automation Ready
- Adjustable Room Airflow
- Radical Flow Duct System Compatible
- Variable Indoor Air Flow Compatible
- Variable Refrigeration Flow Compatible
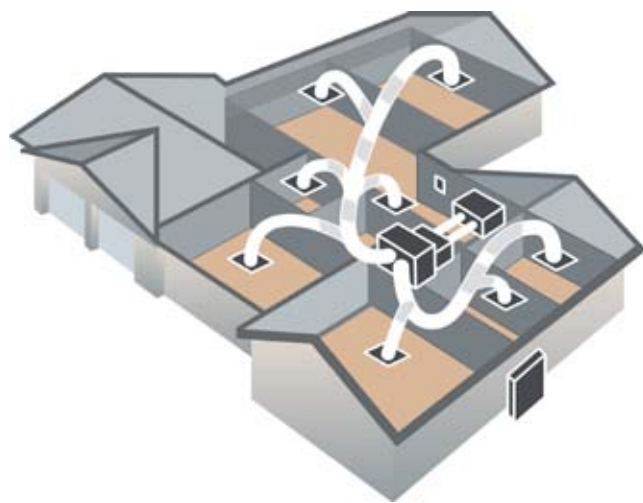
Technical Specifications			Climate Hub
Power Supply	Operating Voltage	Voltage	24V AC ± 10%
		Frequency	50/60 Hz
		Power Consumption	Max 5VA
		Electrical Connection	Terminal connectors, 0.34 to 2.5mm^2 wire
Communication	Base	Interface	WiFi,Ethernet,DHCP,Modbus,RS-485
		Control	Modbus
General		Safety Class	II (IEC 60536)
		Degree of Protection	IP20 to EN 60529
		Material	PC + ABS Plastic (UL94 class V-0)
		Dimensons	57 x 147 x 115 mm

Climate Hub User Control Web Interface

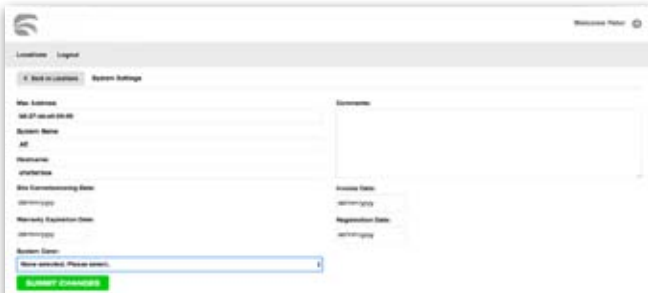Take Control of your Zoning System from the Climate Hub Web Interface.

Create Individual Zone Time Schedules to Suit your Needs.

Climate Hub Remote Management Interface

Table View of all Connected Sites.

Individual System Details to Assist Asset Tracking.

ENVI Central Datasheet

ENVI Central is a truly universal commercial HVAC Central Control Interface. ENVI gives you the freedom to control single or multiple HVAC Systems from one central point of control making it easier to monitor and manage. You have the option to use either the user friendly web interface or use the amazing looking capacitive touchpads that would compliment any modern building design and come in black or white.

FEATURES

- Intuitive easy to use Web Interface.

- Compatible with most Commercial AC systems

- Manage single or multiple AC systems from one interface

- System Fault Reporting

- System Time Scheduling

- Low cost remote management solution for unlimited sites

- Easy new or retro fit installation

- Future NEX Cloud connection for system trend reporting and email alerts

Technical Specifications			ENVI Central
Power Supply	Operating Voltage	Voltage	24V AC ± 10%
		Frequency	50/60 Hz
		Power Consumption	Max 5VA
		Electrical Connection	Terminal connectors, 0.34 to 2.5mm^2 wire
Communication	Base	Interface	WiFi,Ethernet,DHCP,Modbus,RS-485
		Control	Modbus
General		Safety Class	II (IEC 60536)
		Degree of Protection	IP20 to EN 60529
		Material	PC + ABS Plastic (UL94 class V-0)
		Dimensons	57 x 147 x 115 mm

ENVI Central User Control Web Interface

Take Control of your A/C system from the ENVI Central Web Interface.

Create Individual Zone Time Schedules to Suit your Needs.

ENVI Central Remote Management Interface

Table View of all Connected Sites.

Individual System Details to Assist Asset Tracking.

Nex Data Management System Datasheet

NEX Cloud

nex data management systems

Data Monitoring & Reporting

NEX is a powerful data management system for building meters, sensors, and other devices.

Live data visualisation, reports, and alerts can be accessed anywhere, with any web-enabled device.

The NEX Data Management System is a complete hardware and software solution designed specifically for collecting data from your building. The web interface displays readings data in a series of live graphical dashboards, unlocking the full potential of data monitoring.

The DMS series hardware is designed in Australia, and is easy to install and configure. It's a reliable gateway device to connect your building to the NEX Cloud.

NEX will highlight energy performance, help reduce utility expenditure, and identify areas where efficiency can be implemented.

Real Data. Real Results.

Energy
Measure multiple circuits

Air Quality
CO_2, temperature & humidity

Compliance
Measure and track efficiency

Temperature
Air conditioning, cold rooms, freezers

NEX Hardware

Developed for data aquisition

- Support for serial communications and web feeds.

- Gathers data even during internet outages.

- DMS series controllers feature temperature sensor inputs and digital outputs.

- Proudly designed and built in Brisbane Australia.

NEX Software

A powerful web interface for your sites

- Access live data through our web portal from any web-enabled device.

- Customisable dashboard and intuitive charts.

- Detailed charts with CSV data export and email alerts to keep you informed.

FEATURES

- Access via the internet anywhere, anytime.
- Manage energy targets.
- Automatic email alerts.
- Single or multiple sites.
- Minute-by-minute circuit analysis.
- Promote your corporate sustainability image.
- Intuitive, easy to read graphical dashboards.
- Reports customised to your requirements.
- Monitor temperature, humidity, CO_2, water and gas.
- Full API for software integration.

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data management systems

NEX Data Management Systems Pty Ltd
Visit us at **www.nexdata.net.au**
Proudly designed and built in Brisbane Australia

Portable

Monitoring Solution

nex
data management systems

Introducing NEX Portable

NEX Data Management Systems has options to deliver a temporary portable solution, short or long term for your building.

NEX Portable can measure Energy usage, Air Quality and Temperature profiling to provide data and powerful reports to inform decision makers. Uncover effective ways to improve your building's efficiency, including:

- ROI Calculations
- Energy Service Assessments
- Temperature Profiling
- Compliance Testing
- Upgrade Assessments
- Building Performance Reporting
- Before and After Reporting

NEX Portable provides the information you need to make the right decisions.

Real Data. Real Results.

Energy
9 x 60A single phase circuits

Air Quality
CO_2, temperature & humidity

Car Park CO
2 x carbon-monoxide sensors

Temperature
6 x wireless temperature sensors

Powerful Reports

Intuitive reports highlighting building efficiency

- Energy reports include complete power usage, sub-circuit usage, cost breakdown, and identified significant events.

- Reports show peak readings for air quality, temperature, and volatile gases, highlighting compliance considerations.

- Assess building upgrades and calculate ROI using insightful before and after reports.
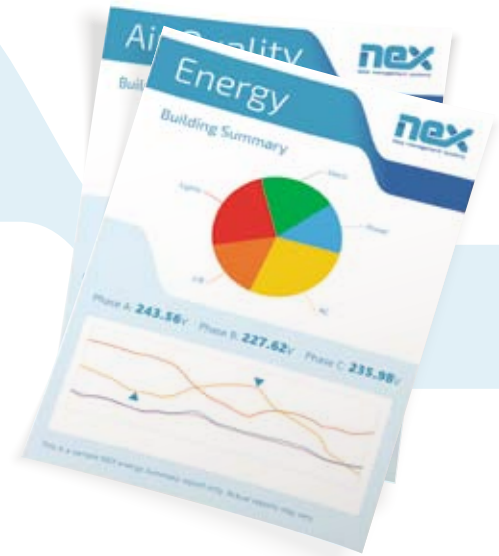
NEX Cloud

The gateway to your building's potential

- Access live data through our web portal for the duration of the hire period.

- Customisable dashboard and intuitive charts.

- Unlock CSV data exports and email alerts with a permanent NEX system and cloud subscription.

NEX Portable Options

Portable monitoring units are hired based on monitoring duration and the type of monitoring equipment required. Prices shown include portable equipment hire only. Installation and setup can be provided to complete the solution.

Complete our online contact form to receive a quote of our turnkey solution, including all hire and installation costs. **www.nexdata.net.au/portable**

Also ask about our comprehensive Building Energy & Compliance Assessment, including all NEX Portable options for a complete look at your building's performance.

Real Data. Real Results.

NEX Portable Pricing

ENERGY rental
$**799**/wk $**1199**/mo

AIR QUALITY rental
$**599**/wk $**899**/mo

CAR PARK CO rental
$**599**/wk $**899**/mo

TEMPERATURE rental
$**599**/wk $**899**/mo

Excludes GST and installation.
POA for longer rental periods.
Terms and conditions apply.
Prices subject to change.

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Proudly designed and built in Brisbane Australia

Metering

Power Meters

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data management systems

NEX offers two intelligent power meter options for a comprehensive energy monitoring setup.

NEX Data Management Systems has options to deliver temporary or permanent energy monitoring solutions for your building, with out of the box cloud connectivity available through the NEX Cloud hardware options.

Our NEM 30 meter features low profile clip on or solid core CTs allowing for quick and easy temporary or long term monitoring installations. It allows for up to 30 single phase or 10 three phase circuits to be monitored.

Our NEM 91 and 93 meters provides the ease and reliability of a traditional DIN rail mounted power meter, perfect for permanent switchboard installations.

NEX provides the information you need to make the right decisions.

Real Data. Real Results.

✔ Reliable
Trusted industry brand

⊕ Accurate
Class 1.0 accuracy

▣ Compliance
Measure and track efficiency

☁ NEX Cloud
Compatible with NEX Cloud services

Technical specs

	NEM 91 Single phase	NEM 93 Three phase	NEM 30 Multi-channel
	x 1	x 3	x 30
Input Voltage	AC 220V ph-n	AC 220V ph-n	AC 220V ph-n or AC 380V ph-ph
Measurements	Voltage, current, power factor, active power, reactive power, apparent power, active energy, reactive energy, frequency		
CT Types	Direct connect: 63A CT: 5A secondary	Direct connect: 63A CT: 5A secondary	See CT's below Solid core CT: 63A Split CT: 50A
Accuracy	Class 1.0 direct Class 0.5S via CT	Class 1.0 direct Class 0.5S via CT	Class 1.0 solid core Class 2.0 split core
Communication	Modbus RTU, 2.4k, 4.8k, 9.6k baud	Modbus RTU, 2.4k, 4.8k, 9.6k baud	Modbus RTU, 4.8k, 9.6k, 19.2k baud
Environment	Temp: -20°C to 55°C Humidity: 5% to 95%	Temp: -20°C to 55°C Humidity: 5% to 95%	Temp: -20°C to 50°C Humidity: 0% to 95%
Dimensions	36 x 100 x 65 mm DIN rail mounted	72 x 100 x 65 mm DIN rail mounted	45 x 97.5 x 62 mm DIN rail mounted

NEM 30 CTs

The NEM 30 has specially designed CTs to make installation quick and easy. Both solid core and split core types are available. To setup the circuits, simply daisy chain from one CT to the next using RJ12 cables.

NEX Service Options

🏢 Installation and meter validation

🔧 Servicing and periodic validation

🔨 Panel design and building

📊 Energy reporting

nex data management systems

NEX Data Management Systems Pty Ltd
Contact us at
www.nexdata.net.au/contact

Real Data. Real Results.

VSD ACH580

Variable Speed Drive

The ABB ACH580 is a fully featured variable speed drive perfect for HVAC applications.

APPLICATIONS

• Pumps

• Car Park Exhaust Fans

• Extruder

• Automatic production line

• Air conditioner

• Water supply

• Food machine

FEATURES

• Power range 0.75 ~ 400kW & IP55 rating for harsh environments.Input voltage range: 220V±15%, 380V±15%, 415V±15%

• With streamlined design the ABB580 can be mounted horizontally next to other drives which reduces the amount of mounting space

• RS485 communication supports standard Modbus-RTU protocol & other most commonly used protocols

• Effortless commissioning using Drivetune mobile application and usage with intuitive main menu to define essential settings without going into the parameter list

• Energy Efficiency menu allows you to follow energy & monetary savings & has a built in kWh counter for hourly & daily consumption
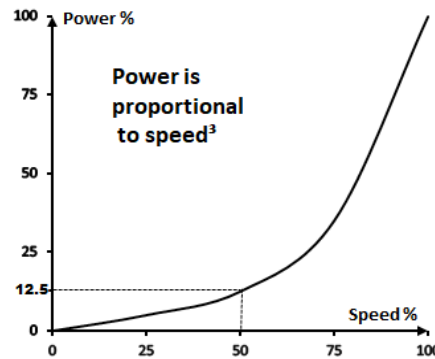
VSD ACH580

Variable Speed Drive

How much Energy could I save with a better motor control ?

Drives regulate the speed of a motor and **can reduce energy consumption by 30 to 50 percent** in many applications and extreme cases by a much as by **70 percent**.

Benefits of using Variable Speed Drive's

Potential Savings

Realise the energy savings potential in your building by using ABB drives and motors with built in energy efficiency menu that allows you to follow energy and monetary savings done by your drive. ACH580 also has a kWh counter for hourly and daily consumption monitoring.

Energy Savings

ABB motors and drives promote energy savings and lowers the total cost of ownership.

Reduced CO2 Emissions

CO2 emission reductions to fulfill local environmental regulations.

Notes

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insight
control

Electrical • Monitoring • Automation