

## Partner Prospectus Embedded Network Solutions



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VRT Systems has been delivering data infrastructure solutions for the energy, buildings and industry sectors since 1978.

Our team has decades of operational and information technology experience, including industrial automation, EMS, SCADA, MES and ERP integration, across almost all industry sectors.

We have developed a new range of solutions for the energy sector that leverage next generation IoT technologies to overcome scalability and flexibility constraints, while meeting the new AEMO embedded metering regulations.



John Meehan Managing Director

John is a Chartered Professional Engineer and has over 50 years' experience delivering industrial information solutions, working in various industries including resources, power, manufacturing, government, transport and buildings industries.



Scott Carden Engineering Manager

Scott is a Chartered Professional Engineer with over 12 years' experience in designing and managing innovative Engineering solutions to clients in the energy, resources, transport, manufacturing and construction sectors to improve operational efficiency, business continuity and regulatory compliance.



# **Our Solutions**





#### **Embedded Networking**

Metering Coordinator, Meter Provider and Meter Data Provider compliant solutions that leverage IoT and next generation devices to provide scalability and flexibility while lowering installation costs.



#### **Energy Management**

Installation and integration of metering devices for all utility types and making it available to business applications, including integrated billing, energy efficiency and sustainability reporting systems.



#### Microgrids

Industrial-grade, real-time control systems delivering tailored and comprehensive solutions from a single, experienced supplier.

# **Our Technologies**

#### **Meters**

We've selected the best-inbreed energy and water meters. Our CET range of Type4 / S7.5 compliant meters provide the smallest installation footprint available on the market today.

### Comms

We use the latest generations wired and wireless communications technologies that maximise security, flexibility and data reliability while lowering installation costs.

### **Data Platform**

WideSky Cloud is a fullymanaged platform handling all operational data. Connect vast populations of sensors and develop comprehensive models of how they interact with their physical environment. Integrates with customer Billing Systems and AEMO MSATS

### **Mobile App**

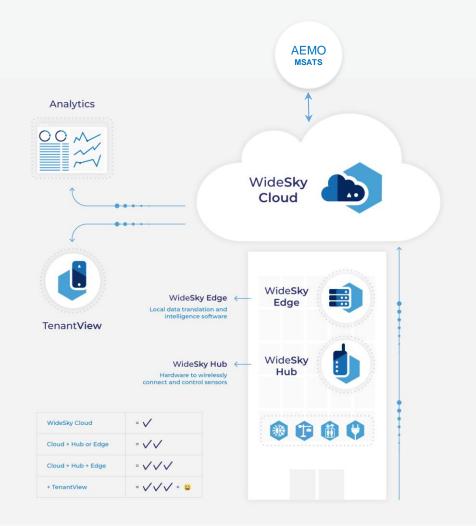
LoRa

Wide**Sky** 

Provide occupants with a real-time view into their utility consumption, cost and greenhouse gas contribution via their mobile device.

ceta





WideSky is an end-to-end suite of systems designed to provide operational data and advanced analytics for the unique needs of Energy, Buildings and Industry.

Scalable, intelligent and easily tailored to your needs, WideSky is optimised to manage large sensor populations and even bigger volumes of operational data, with super high-speed messaging throughout the cloud.

Connect legacy data silos or IoT sensors across your enterprise, perform advanced asset-based analytics, achieve simple data access to your business systems and even provide tenants with real-time insights to own data.









#### WideSky Cloud

WideSky Cloud is a fullymanaged platform handling all operational data allowing you to focus on unlocking the value.

Connect vast populations of sensors and develop comprehensive models of how they interact with their physical environment. Leverage our powerful platform to build asset-based analytics and generate data insights.

#### WideSky Edge

WideSky Edge is a suite of software for creating reliable operational data solutions. With a seamless interface to WideSky Cloud, it delivers critical benefits to your business.

#### WideSky Hub

WideSky Hub gives you easy and economical access to your data by forming a highly resilient wireless mesh network that removes the need for hardwired systems.

With on-board data logging, banking-class public-key cryptography, and a seamless interface with WideSky Cloud, the WideSky Hub ensures data security and continuity.

#### **Tenant View**

TenantView allows building owners to obtain additional Green Star points for residential buildings delivering improved rental yields.

TenantView provides your occupants a live view into their utility consumption, cost and greenhouse gas contribution via their mobile device.



#### Integrated

Integrated utility metering solutions - prevent double ups in metering – many MPs resist 3rd party connections.

Trend towards integrated utility monitoring\billing systems: power, water(s), gas, etc. Single source invoice.

### Innovative

Our innovative, 'born in the cloud' data platform and IoT edge solutions enable scalability while reducing networking infrastructure costs.

### Open

Solutions leverage open source standards to maximise interoperability and minimise vendor lockin.

## Experienced

VRT has a long history working with metering systems and meter data integration. We cover everything from selfpowered wireless mesh networks for pulse water meters, through to integration of EMS, BMS and business systems via high level interfaces.



# **Case Studies**



# **Barangaroo South**

Lendlease engaged VRT Systems to deliver energy efficiencies at Barangaroo South in Sydney's CBD. The precinct is the city's largest urban renewal project since the 2000 Olympics, and is slated to become Australia's first largescale, carbon-neutral community.



### **Our solution:**

Living Utilities partnered with VRT Systems, to collate data from its various utilities across the entire precinct in a bid to improve accuracy and visibility, particularly in relation to billing. The WideSky Cloud data platform, in conjunction with a variety of equipment installed onsite, has enabled Lendlease to apportion exactly how much electricity or water each client uses. The data is collated in real-time. This also allows for the ongoing analysis of things such as the thermal energy used to power the air conditioning, which helps identify where efficiencies can be made.

### The outcomes:

- Apartment level integration achieved via WideSky Edge devices
- Billing and C&I metering integrated into a single system to avoid meter duplication
- Utility cost and greenhouse gas contributions available to individual tenants in real time on their portable devices via TenantView
- Billing data exported in NEM12, NEM13 and C4 formats





# Trusted by Companies Everywhere





Department of Defence























C GemLife















TRIDIUM





**THREAD** 







#### **VRT** SYSTEMS

# **Benefits for Meter Providers**

- More meter options, all S7.5 certified
- Open (modbus) as well as proprietary comms options
- Smaller meters result in owner cost savings and tenant benefits
- More communications options, incl. wireless mesh networking, LoRaWAN, battery operated, etc.
- Bank level cyber security
- More options for integrating pulse and power metering
- Easier integration of billing and EMS metering (saves meter duplication)

# **Benefits for Retailers and ENSPs**

- Vast experience in multi-utility networks
- Proven track record in embedded networks
- Industrial experience enables a fresh approach
- Open systems provides flexibility now demanded by building owners
- Real-time data systems meet emerging requirements from tenants
- Real-time control inherent in the platform enables demand response, etc.
- Integrated billing single invoice covering all utilities





# Next Steps

Please make contact with our MD John Meehan in order to explore this opportunity further.

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