

TERRANOVA
INNOVATIONS FOR UTILITIES



 **TAMM**
THE SMARTER WAY TO READ **ALL YOUR METERS**



TAMM (Terranova Advanced Metering Management) is the market leading software suite that brings the benefits of smart metering to the gas, electricity and water sector. Our solution is agnostic and can manage over 100 models of meter and concentrator types. Choose TAMM as part of your digitalisation journey and encourage greater innovation, reduce costs and unlock new business value.

KEY COMPONENTS:

- **TAMM AMR (Automatic Meter Reading)** – our software is communication technology and manufacturer agnostic, bringing out-of-the-box compatibility with a plethora of meter and concentrator types. At last, an AMR that lets procurement make buying decisions which are right for your business, improve resilience and deliver operational cost savings.
- **TAMM MDM (Meter Data Management)** – all the benefits of software based unified management together with pre-processing of metering and consumption data. Use MDM to deliver operational excellence via streamlined smart metering processes and feed meter data analytics to create new business value.
- **TAMM TPS (Prepayment System)** – a powerful yet versatile software solution specifically aimed at dealing with the challenges of administering prepayment within the gas, electricity or water sector. Give your customers access to wider tariff and payment options, secure revenue, and limit bad debts and losses to your organisation.
- **TAMM CNM (Communication Network Manager)** – software that brings automation and efficiency to managing radio-frequency communication networks. Robust and reliable connections now mean that your smart meters and concentrators stay connected to guarantee meter readings.
- **TAMM Mobile** – a highly intuitive and dependable mobile application that is perfect for office or field based teams. Choose from a wide range of built in functions to effortlessly administer localised actions, such as meter configuration, firm-ware updates, troubleshooting, data recovery, and much more. Save time, improve productivity, and stay in control of over 50 smart devices (hubs, concentrators & smart meters) with our vendor agnostic solution.

ADDING VALUE

- **Centralised Interface** – manage all your smart devices from one highly intuitive and fully configurable interface that supports your workflow whilst improving the user experience.
- **Multi-vendor support** – one simple platform to manage multiple devices from different manufacturers.
- **Multiple technology support** – support a host of communication technologies such as GSM, GPRS, RF, NB-IoT and others. We continually strive to bring our customers the benefits of tomorrow's technology, today. Exciting innovations pave the way for better wireless meter communications through reduced battery consumption, improved coverage, and lower costs of managing assets.
- **Multi-service** – specially designed for use across the gas, water or electricity sectors, making it easier than ever to manage devices belonging to more than one company or service type.
- **Multi-company** – open up new revenue streams for your business and provide metering services to other companies via the same TAMM platform to maximise your investment.
- **Metering Efficiency** – TAMM is equipped with a wide range of tools designed to realise the advantages of smart metering. Reduce costs and decarbonise your activities via fewer onsite visits, increased data collection frequency and also address meter accessibility concerns.
- **Metering Effectiveness** – increase the range of data types collected, such as temperature, pressure and others. Eliminate estimated readings, pre-inform analytics with pre-processed metering and consumption data, and much more.
- **Operational Excellence** – a wide range of built-in tools help optimise and increase successful on-site interventions such as late payment management, meter substitution and other activities. Improve team responsiveness, reduce end user wait times and increase satisfaction levels.
- **Real-Time Monitoring** – a whole host of powerful KPI and diagnostic tools in the form of charts, dashboards and spatial analysis (GIS). This means your organisation can closely monitor device roll-out statuses, performance and readings availability, load balancing, and other key activities.
- **Better Planning Support** – our analysis and diagnostic tools offer useful insights into new meter roll-outs and maintenance planning. Experience better appreciation of signal coverage levels, improved choice of telco providers, concentrator saturation, meter cohort installation progress, and more.
- **Empowering teams** – save on training costs and give your field-based teams the confidence to carry out more complex tasks via pre-configured files on their mobile devices.

- **System integration** – TAMM is easily integrated into existing or legacy deployments to extend core capabilities and deliver savings through rapid implementation and reduced system downtime.
- **An integrated suite** – we offer a variety of complementary software components, making it easier for you to choose with the right TAMM configuration that supports your digitalisation journey.

CORE FUNCTIONALITY

- **Remote Reading** – freedom to choose the frequency and range of data collection types such as metering, volumes, pressures, temperatures, power, etc. Combine this with TAMM's ability to pre-process and transfer to back-office systems and keep your organisation informed and responsive to areas such as physical load balancing, and others.
- **Remote Control** – take control and issue powerful commands to your devices such as remote configuration, reading frequency, set communication parameters, and more. Remotely operate meter valves and safely administer activations, variations, supply suspensions, and address leakages, etc.
- **Enhanced VEE** – using artificial intelligence and machine learning TAMM greatly improves the speed and performance of validation, estimation and editing.
- **Workflow alignment** – manage your workflow with total confidence using a solution that offers real time control tools specially designed to support and automate your office or field-based activities.
- **Diagnostic and Alarms** – extensive array of diagnostic tools detect device malfunctions, data anomalies, event monitoring. Alarms can be configured by the user to define critical operational levels.
- **Auto alarm resolution** – a built-in engine for automatic resolution of specific alarm types. If meter communication is lost, an alarm is raised and then cancelled when meter communication is restored.
- **Localised Interface** – use Bluetooth or optical probes to locally configure operating parameters of field devices. Also, quickly view or download data and diagnostic registers to perform firmware updates.
- **Communication bridge** – in the event of communication malfunction, operatives can use the TAMM mobile app to rapidly re-establish contact and send metering data back to the central system.
- **Graphic Analysis & GIS** – quickly perform meaningful data analysis with our selection of powerful tools including spatial (GIS) to rapidly identify asset locations. Also, choose from a variety of clear graphical views and advanced reporting functions to improve data driven decision making.
- **Prepayment** – encourage direct customer engagement via access to multiple payment portals. Also execute meter operations, top-ups and manage late payment concerns, and much more.

THE TERRANOVA WAY

At Terranova we believe that IT should positively enable your business and not impede it. Our expertise within smart metering means that our products and services are best suited to support your business processes. As a leading supplier to the utility sector we take complex processes and simplify them with powerful and highly versatile software solutions.

The Terranova design philosophy promotes the following:

- **Interoperability** – a true vendor-agnostic solution which means your organisation is free to choose the right meter deployments and communication protocols. No more worries over procurement constraints or backward compatibility.
- **Modularity** – TAMM is modular in design and highly configurable. This means that it can be tailored to meet your specific business requirements as well as making it ideal for integration into complex legacy environments.
- **Scalability** – changing requirements shouldn't mean compromising software performance. Experience the immediate benefits of using TAMM with the smallest meter cohort before gradually rolling out over your entire smart meter deployment.
- **Security** – TAMM is a highly versatile and powerful software solution which utilises the latest security measures. We work in partnership with one of the world's oldest and well-respected universities to eliminate metering vulnerabilities. Our advanced cyphering systems ensure that your data is protected. Communication channels are also secured for safer operation of front-end applications and meters. Finally, implementation is highly robust and includes authentication and profiling.

Find out more about the benefits of partnering with Terranova to promote operational excellence, reduce overheads and create business value with solutions that support your digitalisation journey.