# EUROTECH

**Imagine. Build. Succeed.**

# EUROTECH PROVIDES ADVANCES IN HEALTHCARE TECHNOLOGY

**Eurotech is using a Device to Cloud environment to revolutionise diagnostics in healthcare, not only within hospitals and clinics but also for managing the medical needs of patients at home, with solutions ranging from Blood Monitoring devices to Speech Generation equipment.**

# EUROTECH PROVIDES ADVANCES IN HEALTHCARE TECHNOLOGY

By integrating Eurotech's Embedded Gateways with Cloud based data delivery infrastructures, high performance connectivity is provided between dispersed systems to give medical staff hugely enhanced support in the diagnosis and treatment of patients. Using Eurotech's Device to Cloud (EDC) approach offers huge flexibility with major cost savings on IT infrastructure, whilst providing built-in reliability and data security. With practically infinite scalability, tens of thousands of devices and device categories can be added to a network without re-engineering or purchasing additional infrastructure hardware. Available across a range devices including embedded, fixed, mobile and wearable computers, Eurotech's Everyware™ Software Framework (ESF) facilitates the seamless integration of systems within this advanced communications environment.

The Eurotech Everyware™ Medical Gateway uses this connectivity to communicate to medical devices at the patient's home, managing data delivery requirements for conditions such as diabetes, congestive heart disease and chronic obstructive pulmonary disease as well as monitoring the patient's adherence to taking prescribed medication. Based on Eurotech's Helios™ communication gateway, this application hosting device offers standard interfaces to a wide variety of medical devices, including the Roche Glucose meter and A&D Medical's weight scale machine and blood pressure cuff. Via its flexible communications options, it transmits data in real time over the Cloud network to physicians monitoring patient conditions and, through supporting home care programmes, leads to significant reductions in hospital admissions. Based on open standards promoted by Continua Health Alliance, the Everyware™ Medical Gateway is user friendly and simple to start up, ensuring it can be deployed by staff visiting patients at home.

Tim Taberner of Eurotech comments: *"Cloud computing is used round the clock by businesses and private individuals for a wide variety of tasks from social networking to online banking, with increasing numbers of business critical or sensitive applications being deployed. Security, resilience and privacy are an inherent part of the fabric of the Cloud, which normally provides far greater levels of protection than an organisations own IT infrastructure.*

*Once the myth that this is not the case has been dispelled, users become very enthusiastic about the exciting technological environment offered by EDC and ESF with the flexibility and cost effectiveness it provides to allow their businesses to rapidly react to market changes. These benefits are equally valid for supporting healthcare providers in managing development and organisation in hospitals, clinics and practices.*

## DATA CAPTURE

Eurotech products frequently provide the unseen but essential component that drives innovative solutions for medical communication and data capture. This is demonstrated by Eurotech's involvement with the US medical technology specialists GE Healthcare in the production of their EView modular data capture device, which incorporates a fully featured, low power, embedded computer system from Eurotech. Working in close partnership with the customer, Eurotech also provided a wide range of technical support, including rigorous testing of the device to ensure that it had the rugged features necessary for the application, such as resistance to shock, vibration, electrostatic discharge, electromagnetic emissions and temperature.



EView allows clinicians to review respiratory data from a ventilator over the period leading up to a problem that triggers an alarm. This portable flexible device, which is attached to GE Healthcare's Engström Respiratory Carestation, has heralded a major advance in the information available to clinicians, because previous data capture methods in ventilation only provided a

**EUROTECH**
Imagine. Build. Succeed.

# EUROTECH PROVIDES ADVANCES IN HEALTHCARE TECHNOLOGY

snapshot in time without supplying details of the event before a respiratory problem occured.

What has now been made possible with EView and the data capture capabilities of the Eurotech device is a quality and depth of respiratory information similar to that seen by clinicians when monitoring a patient's heart rate and other vital indicators. Able to store, retrieve and maintain data when shut down, EView both aids clinicians in selecting treatment options and provides invaluable information to medical researchers in their study of respiratory conditions.

## COMMUNICATING HEALTH

Technology is pushing the boundaries of healthcare practice in many ways. Hands free battery powered devices such as the Eurotech ZYPAD Rugged Wrist PC, for example, offer wireless connectivity allowing clinicians and emergency services to check on patient information no matter where they are or what they are doing. The lightweight and comfortable ZYPAD is worn on the wrist for complete hands-free operation, allowing users to carry out a range of tasks using both hands while still having full computer access at all times. This is a major benefit for clinical decision making, patient management and the organisation of medical staff and assets.

Technological advances are also supporting people with speech and learning challenges, via devices such as the DynaVox Xpress™, the world's first comprehensive augmentative mobile

communication tool. Produced in collaboration with Eurotech and using low power Intel® Atom™ systems to assist speech generation, this product from DynaVox Mayer-Johnson lets those with speech challenges take this invaluable aid with its touch screen technology into society as a handy mobile device. Users can include those suffering from strokes, Autism, ALS, brain injury, Cerebral Palsy, Downs Syndrome and Apraxia.

With systems and solutions already deployed in Eurotech's US market, these developments are now rapidly gaining interest in Europe and the rest of the world. The US experience provides useful indicators about the expanding potential of communications and data management technology in healthcare. With today's emphasis in Europe for organisational change in both state and private sector medicine, the possibilities of additional support in areas such as remote patient monitoring can become very attractive to medical decision makers.

For more information on Eurotech please visit our website www.eurotech.com or contact our sales team at sales.emea@eurotech.com.

**EUROTECH** S.p.A. Via Fratelli Solari, 3/A - 33020 Amaro (UD) – ITALY
Tel. +39 0433 485411 - Fax. +39 0433 485499 - welcome@eurotech.com - **www.eurotech.com**

⟨Ξ⟩ EUROTECH
Imagine. Build. Succeed.