

Remote Access To Critical Health Information

Lantronix device server technology has proved to be just what we needed: reliable, accurate and easy-to-install. These features are crucial for all equipment in the medical environment, where peoples' lives literally depend on it. Lantronix fit our needs perfectly."

**– STEVE MORGAN,
FUKUDA DENSHI
UK**



CHALLENGE Each intensive care patient requires several devices to continuously monitor their health; however strained hospital staff need a more efficient and reliable way to monitor these devices.

SOLUTION With Lantronix multi-port device server technology, Fukuda Denshi was able to incorporate all monitoring equipment to one central location allowing information to travel in real-time to a hospital's monitoring center.

BENEFIT Lantronix provided the technology to add a new service dimension to Fukuda Denshi's product, saving hospitals money and freeing staff to provide better patient care.



FUKUDA DENSHI, EXPERTS IN THE RESEARCH AND manufacturer of medical electronics equipment, specializes in heart and circulatory organ monitoring instruments. Fukuda Denshi supplies easy-to-use medical equipment using the latest technology to provide advanced information-oriented medical care. Its patient-monitoring products provide various display configurations ideal for bedside or portable use in both large and small hospitals.

THE CHALLENGE: TIME CONSUMING MANUAL DATA COLLECTION OF CRITICAL PATIENT INFORMATION

Patients in an Intensive Care Unit (ICU) each require an average of 10 different types of equipment to monitor drugs administered and their vitals, including cardiovascular and respiratory information. This challenges ICU staff to simultaneously monitor and collect data from several hundred devices monopolizing their time and creating the possibility for human error.

To solve this problem and improve operational efficiencies, Fukuda Denshi needed a solution that would connect all devices to a central database and enable secure transmission of the patient's

information in real-time. This would allow consolidation of patient information to one network in order to access and transform that information into actionable knowledge. With the patient's well being on the line, the solution needed to be uncompromisingly reliable and easy to integrate with Fukuda Denshi's existing equipment.





THE SOLUTION: RELIABLE REMOTE MONITORING TECHNOLOGY PROVIDED THE CONNECTIVITY NEEDED TO IMPROVE THE OVERALL LEVEL OF PATIENT CARE

Fukuda Denshi sought the expertise of Jade, a Lantronix authorized distributor based in Newton Le Willows, England who selected Lantronix device networking technology for its reliability, ease-of-installation and low cost.

A multi-port solution, Lantronix device server included all the necessary hardware and software straight out-of-the box. Along with Lantronix committed technical support, Fukuda Denshi was able to quickly and easily connect monitoring devices to one central database, allowing staff to analyze information instantaneously and, in the event of an emergency, activate an alarm. This has added a new quality of service dimension to Fukuda Denshi's products by delivering a large amount of life sustaining information quickly and reliably over a network to a hospital's monitoring center. Such an immediate response can save a human life or increase the patient's chances to recover.



THE RESULT: A SEAMLESS SOLUTION THAT PROVIDED UNINTERRUPTED, REAL-TIME PATIENT HEALTH SURVEILLANCE

Thanks to Lantronix technology, Fukuda Denshi is now able to offer uninterrupted, real-time patient information. With the added Lantronix remote monitoring capability, medical staff can remotely analyze and respond to a patient's needs immediately. This improves the overall quality of patient data collection, its accuracy and increased frequency. Medical staff is no longer required to record data manually, which saves time and costs, and frees up the staff's time to focus solely on the patients' well-being.

Steve Morgan of Fukuda Denshi UK

commented, "Jade and Lantronix's ability to supply all the requested devices on time and their technical support has been outstanding. Lantronix device server technology has proved to be just what we needed: reliable, accurate and easy-to-install. These features are crucial for all equipment in the medical environment, where people's lives literally depend on it. Lantronix fit our needs perfectly."

Fukuda Denshi has now installed over 70 Lantronix devices.

The Lantronix Device Server Advantage



- **REDUCED COSTS** Enables minimal engineering effort to connect multiple bedside monitors to a single network connection, plus Lantronix device servers minimized installation costs.
- **HIGHEST SECURITY** AES encryption for secure communications which satisfy patient privacy requirements.
- **SCALABILITY** Lantronix device servers network-enabled up to 60 devices, allowing monitoring from a single computer workstation.
- **TIME SAVINGS** To both the system designer as well as the end customer. System designers are able to concentrate on their core competencies. Remote management of devices eliminated the need for nurses to walk from room to room, giving them time to concentrate on those patients who need them most.

