

# Case Study

## Adapting FCL Components' FCL-FTP-648 Printer



### The Customer

Our client, Philips, specialises in the design, manufacture, sales, and worldwide distribution of remote monitoring and resuscitation solutions for pre-hospital and critical care services.

Philips is a trusted partner to customers on the frontline in time-critical situations – this includes large, complex and demanding military and government customers.

The Tempus Pro was developed as a new concept in vital signs monitoring. It places the needs of the pre-hospital care professional at the heart of its design. Ground-breaking in functionality, it is light enough to carry to the patient, small enough to hold in one hand and rugged enough to deploy in any situation.

The device, although small, is highly robust and packed with all the functionality needed. This includes ECG, defibrillation, laryngoscopy, and ultrasound combined with advanced patient data collection and sharing, real-time data streaming.

### The Challenge

The Tempus Pro was being developed for use in any environment, from ambulances, planes and boats to medical evacuation vehicles and battalion aid stations. Operating the device in such harsh, demanding environments set the standard for Inelco Hunter and FCL Components to match the concept with a ruggedised printing solution.

The print solution had to reliably print ultrasound and ECG results in all types of environments; therefore, weight, shock absorption, dimensions, and power consumption were important factors.

### The Solution

These crucial requirements were met by customising the FCL-FTP-648 printer. This 4-inch thermal printer features a metal body instead of the commonly used plastic body to provide several design advantages.

The dimensions of the printer with a metal frame are relatively small (a plastic body would require a larger structure to obtain the same rigidity). The metal frame provides robustness and guarantees a perfect alignment of the thermal head and platen, preventing the need for additional reinforcement.

The robust nature of the metal frame also optimises shock and vibration resistance, and functions as a heat sink for heat generated by the printing head, whilst shielding the components from any ESD generated by paper friction.

Inelco Hunter and FCL Components both have long-standing experience in designing and manufacturing high quality printers. Inelco Hunter has been providing customised solutions for over thirty years, always with the greatest care and devotion to clients.

### The Conclusion

Inelco Hunter and FCL Components are proud to have been able to meet Philips' stringent technical and quality requirements, ensuring a reliable, high-quality, printing solution for situations where reliability and quality are vital.

