

Design, Development & Fabrication LIFEVIEW PDA III Enclosure

TS Metals transform existing LIFEVIEW® PDA III enclosures into robust, lightweight, IP66-rated monitoring boxes, providing complete design development, fabrication, testing and manufacturing support.

QUARTZTEQ | CONDITION MONITORING SOLUTIONS | SWITZERLAND

Our Customer's Challenge

Quartzteq required a specialist enclosure for its new LIFEVIEW® PDA III monitoring system, but the existing pre-moulded design was not ready for production and required significant further development. The enclosure needed to be robust, lightweight and practical for installation, operation and maintenance, while also providing a high level of protection against dust and water ingress.

Achieving the required IP66 rating presented a particular challenge, as the enclosure design needed to incorporate effective sealing arrangements, a secure locking mechanism, durable hinges and a viewing window without compromising accessibility or performance. In addition, the product had to be suitable for repeatable manufacture and capable of withstanding demanding operating environments.

Quartzteq needed a partner with the engineering and fabrication expertise to take the enclosure beyond its initial concept, refining the design, selecting appropriate materials and components, and validating performance through testing. The company was looking for a complete solution that would deliver a reliable, professionally finished enclosure ready for deployment worldwide.

The TS Metals Solution

TS Metals provided the engineering and fabrication expertise needed to develop the enclosure from an initial concept into a fully engineered, production-ready solution. Working closely with Quartzteq, the team conducted a detailed engineering assessment of the original pre-moulded housing and developed a modernised design through multiple iterations, optimising both the enclosure architecture and its functional performance.

As part of the development process, TS Metals researched and evaluated suitable materials, protective coatings, printing methods and hardware specifications to ensure the enclosure delivered the required performance, durability and finish. The team also designed and integrated a number of bespoke elements, including the viewing window, locking mechanism, sealing arrangement, hinges and internal bracketry, tailoring the enclosure to the application's specific requirements.



The TS Metals **Solution** (cont'd)

To achieve the required IP66 rating, TS Metals carefully developed the enclosure construction and sealing system, ensuring every component worked together to provide a high level of protection against dust and water ingress. Throughout the project, product trials and validation testing were coordinated to evaluate performance, verify durability and guide ongoing design improvements.

TS Metals also collaborated with marketing teams to ensure the finished enclosure aligned with Quartztec's brand identity and visual requirements. By combining design development, fabrication, assembly, finishing and testing capabilities, TS Metals delivered a robust, lightweight and repeatable enclosure solution ready for worldwide deployment.

Key Benefits

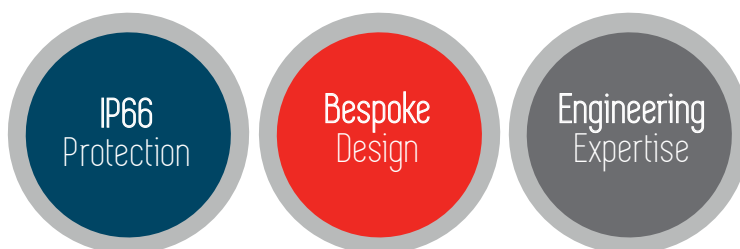
- IP66-Rated Protection:** Developed and tested to provide reliable protection against dust and water ingress in demanding environments.
- Improved Durability:** Optimised materials, coatings and hardware enhanced the enclosure's strength, longevity and performance.
- Bespoke Design Features:** Custom-developed viewing window, locking mechanism, sealing system and internal bracketry tailored to application requirements.
- Single-Source Project Delivery:** Complete support from design development and fabrication through to assembly, finishing and testing, simplifying the process for Quartztec and Quartztec.



TS Metals played a key role in developing our LIFEVIEW PDA III enclosure from concept to production. Their engineering expertise, attention to detail and highly collaborative approach enabled the rapid delivery of a robust, high-quality solution that met our technical requirements and achieved the required IP66 rating.

Their commitment and agility were instrumental in bringing the product to market successfully.

Karim Abdelnour, Business Manager, Quartztec



T: +44 (0)1788 540019

E: tsmetals@quartzelec.com

www.tsmetalsquartzelec.com

TS METALS

