



Brazilian Army GRiD's Export Success

GRiDCASE 2530 Tablet

Project Background

In 2021, the Brazilian Army launched a competitive requirement for several hundred rugged tablets to be integrated into its newest VBTP-MR Guarani vehicle. The Guarani is a critical capability that forms a key part of the nation's military modernisation, serving as a 20-tonne, 6x6 wheeled armoured personnel carrier (APC).

GRiD Defence Systems was selected to deliver its GRiDCASE 2530 for this important vehicle. GRiD's rugged tablets have been successfully delivered and are now integrated to form a key element of enhancing the mission readiness and situational awareness for Guarani crew members.

Project Requirements

The Guarani APV was designed and built leveraging the joint engineering expertise of leading vehicle manufacturer Iveco Defence Vehicles (IDV) and the Brazilian Army. According to Army Technology, a \$3.37bn contract was signed in December 2009 to procure over 2,000 vehicles between 2012 and 2030.

Today, Guarani forms the backbone of the Brazilian Army and represents a key land capability, especially for rapid and long-range missions where high manoeuvrability is required. The Guarani 6x6s come in several variants and are equipped with a range of electronic systems, including ISR sensors, battle management systems and communication suites.

The GRiDCASE 2530 is a key human-machine interface tool for operating many of these advanced systems.

Why GRiD?

GRiD offered a robust, flexible, and compact rugged tablet with the GRiDCASE 2530 that perfectly combines cutting-edge military standards with essential interface compatibility.

As with all GRiD products, the GRiDCASE 2530 is fully qualified to meet a number of military standards, including strict MIL-STD-810G environmental standards. This covers a number of rigorous tests including 26 drops onto every side, face, corner and edge. The GRiDCASE 2530 rugged tablet is also qualified to MIL-STD-461G for EMC, Ground Army Limits, and has a very low EMC profile.

Significantly, GRiD's utilisation of military-grade D38999 Series III connectors was a decisive advantage, ensuring maximum reliability in the Guarani's demanding operational environment. The triple-thread screwing system and robust cylindrical shell provides superior sealing against water, dust, shock, vibration, and electromagnetic interference (EMI); all challenges that need to be met in an APV environment.

Furthermore, with a pinned connector for data and power – instead of standard commercial off-the-shelf ports – GRiD can significantly enhance security, making it difficult for unauthorised personnel to extract data without intimate knowledge of the pin configuration.

The D38999's inherent flexibility allows for combined power and data transfer with varying pin sizes (e.g., size 20 pins for up to 7.5 Amps power) and multiple interface standards within a single connector, meeting all platform requirements.

Most importantly, GRiD worked closely with the customer to ensure that the solution selected was the right one for them. The GRiDCASE 2530 was tailored specifically for the Brazilian Army's needs, enhancing installation, ease of use, and mission effectiveness.

The GRiD team was able to deliver bespoke solutions designed to ease installation directly into the vehicle, including custom mounting points. The system met the requirement for a modern touchscreen interface, providing an intuitive and responsive command and control environment for the operator in a challenging and compact environment.

Conclusion

Long-term reliability and high performance in the harshest environments, coupled with the ability to be configured with the exact connectors, pinouts and mounting solution for the vehicle, made the GRiDCASE 2530 the perfect solution for the Brazilian Army.

The completed delivery of the units showcased GRiD's ability to meet stringent export requirements for foreign customers, as well as provide a comprehensive vehicle tablet solution that will enhance the operational effectiveness of the Brazilian Army for many years to come.

