

Rugged Vehicle Terminal Solution ODM and OEM Service

Solving challenges for an advanced vehicle in an extreme environment with the right technologies.

The terminal could be defined as stationary or tablet computers, they are used in situations where high computing power is needed in different types of environments or vehicles. It comes in many sizes, from 7-inch to 19-inch and most of them have touch screens so that workers can operate them via simple touch interfaces. A terminal mounted in a construction or agriculture vehicle must be able to withstand extreme vibration, high temperature, as well as exposure under the sunlight. With the number of vehicle terminal options available, knowing which will best suit your needs can be a challenge. The Sysgration OEM/ODM services, implement the latest in rugged technology, are making the decision easy.



Challenges

Solutions

Results

1 Tough and Harsh Environment



The terminal must endure the most harsh vehicle environments including shock, vibration, weather, dirt, humidity

- Sysgration has many years of experience in selecting materials for Rugged Vehicle Terminal that can withstand a harsh environment
- Double injection and insert molding process to achieve IP Protection.
- Our products are designed, manufactured and qualified to pass MIL-STD-810F/G, SAE J1455, and SAE J1113



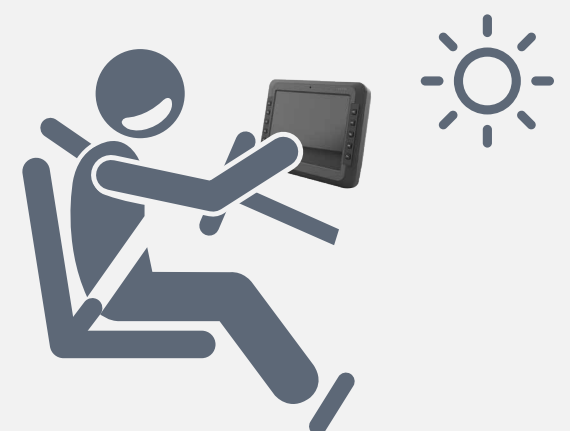
IP65-67 rating that can withstand water, dust, shock and vibration

2 Outdoor Readable Screen



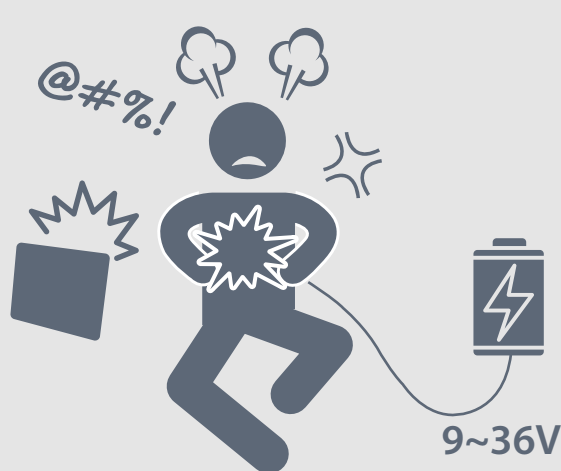
Making the terminal screen readable outdoor

Optical bonding to affix the glass or touch screen to the front of the panel, filling the miniscule air gap between the glass and panel.



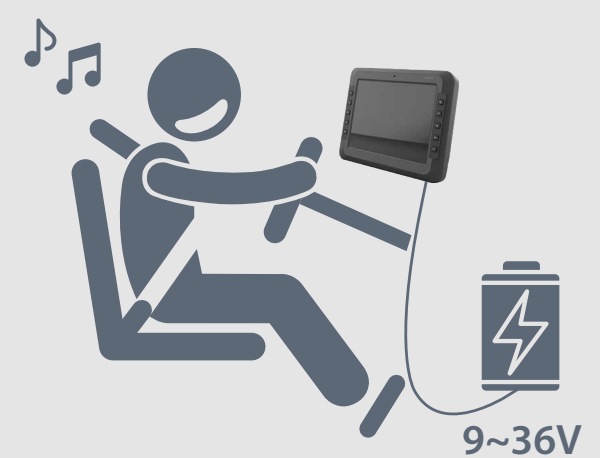
- Makes the terminal readable in outdoor environments
- Enhance durability against shock and vibration
- Prevents condensation and fogging in high humidity and salt water intrusive environment

3 Vehicle Power



Withstand transient in vehicle power

DC power input is designed to handle transient voltage conditions, load dump and cold cranking. We designed our power input with wide voltage input ignition sense and short reverse polarity protection to withstand the transient in vehicle power.



- Immunity to potential interference from conducted transients along battery feed from heavy duty vehicle

4 Vehicle CANBUS



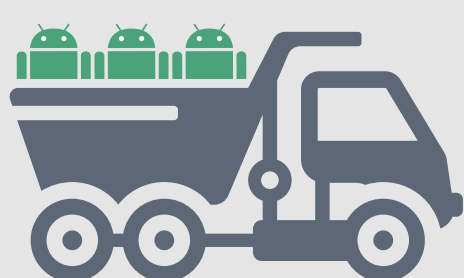
Implementing CANBUS communication protocol in Android Systems

Our expertise understand the protocol and ready with API that can connect the terminal with CANBUS from various range of vehicle



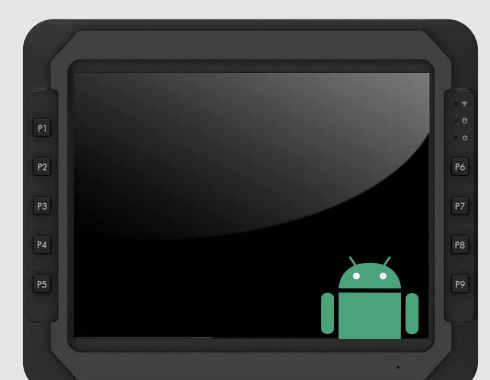
Sysgration can support full BSP for different vehicle

5 Android Ready Solution



The off-road and heavy duty vehicle industries are currently in the midst of migration from legacy mobile solutions to run on new up-to-date platform as Android

Using NXP i.MX8M series which was designed to fully supports the Android Operating Systems through highly optimized BSPs that shorten the product development time to market



Android Ready Solutions for Rugged Vehicle Terminal