



SERVING PEOPLE ON THE MOVE

IVU-3100

Integrated Vehicle Unit

Maintain reliable communications quickly and safely with operators in your mobile fleet using Orbital TMS' Smart Mobile IVU. The IVU-3100 is a high performance unit for the management of the communications and control functions of the on-bus equipment.

The IVU-3100 is a microcomputer-controlled device with a powerful Pentium based processor that:

- Interfaces with mobile radio for voice and data communications.
- Continuously determines vehicle location from its internal GPS, and fixed-end DGPS corrections if available.
- Continuously monitors schedule and route adherence for fixed-route vehicles; notifies users of off-route and early/late conditions via an exception message and schedule deviation.
- Provides central control for vehicle peripherals such as annunciators, destination signs, APCs, fare boxes, etc.
- Monitors engine status, vehicle speed, and silent alarm via J1708.
- Supports street maps and full turn by turn navigation.
- Supports full paratransit scheduling system integration.



Designed for the Transit Industry

Using an industry standard embedded PC architecture, the IVU-3100 is an "Open Architecture" product supporting Windows CE and QNX real-time operating system software. It is fully compliant with the ITS/FTA SmartBus as well as SAE J1708 and SAE 1587 Vehicle Area Network (VAN) standards, and is capable of interfacing with various radio networks including VHF, UHF, and 800/900 MHz trunked simulcast or multicast radio systems.

Durable: Orbital's IVU-3100 is designed to meet the necessary specifications required for heavy-duty vehicle applications.

Proven And Operating System: Orbital's IVU-3100 is installed/operational in over 3,000 transit vehicles.

Transportation Management Systems

7160 Riverwood Drive • Columbia, MD 21046
1-888-ORBTRAC www.orbitaltms.com



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Mobile Integrated Vehicle Unit

FEATURES:

- Ten RS-232/RS-485 serial ports
- 266 MHz Pentium Class x86 processor, upgradable
- Odometer interface
- Two J1708 ports and two CAN/J1939 ports
- Supports numerous wireless communications systems
- Supports 2 PC cards, 3.3 or 5V
- Memory
 - 32 - 256 Mbytes of RAM
 - 2 SLOTS OF 96 - 512 Mbytes of Compact Flash (Mass Storage)
- One Ethernet port
- Optional Isolated Discrete I/O signals
 - 12 inputs
 - 8 outputs
- Optional Gyro
- Optional Isolated Discrete I/O signals
 - 12 inputs
 - 8 outputs

SPECIFICATIONS:

Power Requirements Continuous:

Voltage: VDC Max: 40 Min: 9
Wattage: 28W, including GPS

Environmental:

Operating Temperature: -30 to 70° C

Storage Temperature: -40 to 85° C

Humidity: 98% at 38° C

Shock: 30g duration for 6 milliseconds

Vibration: 2g peak RMS, 5 to 150 Hz

SA EJ1455 compliant

MILSTD810F

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