Electronic Toll Collection

In Electronic Toll Collection, the AT/Comm system operates in both a read-only and read-write mode. Compatibility between the two modes ensures flexibility and upgradable capabilities.

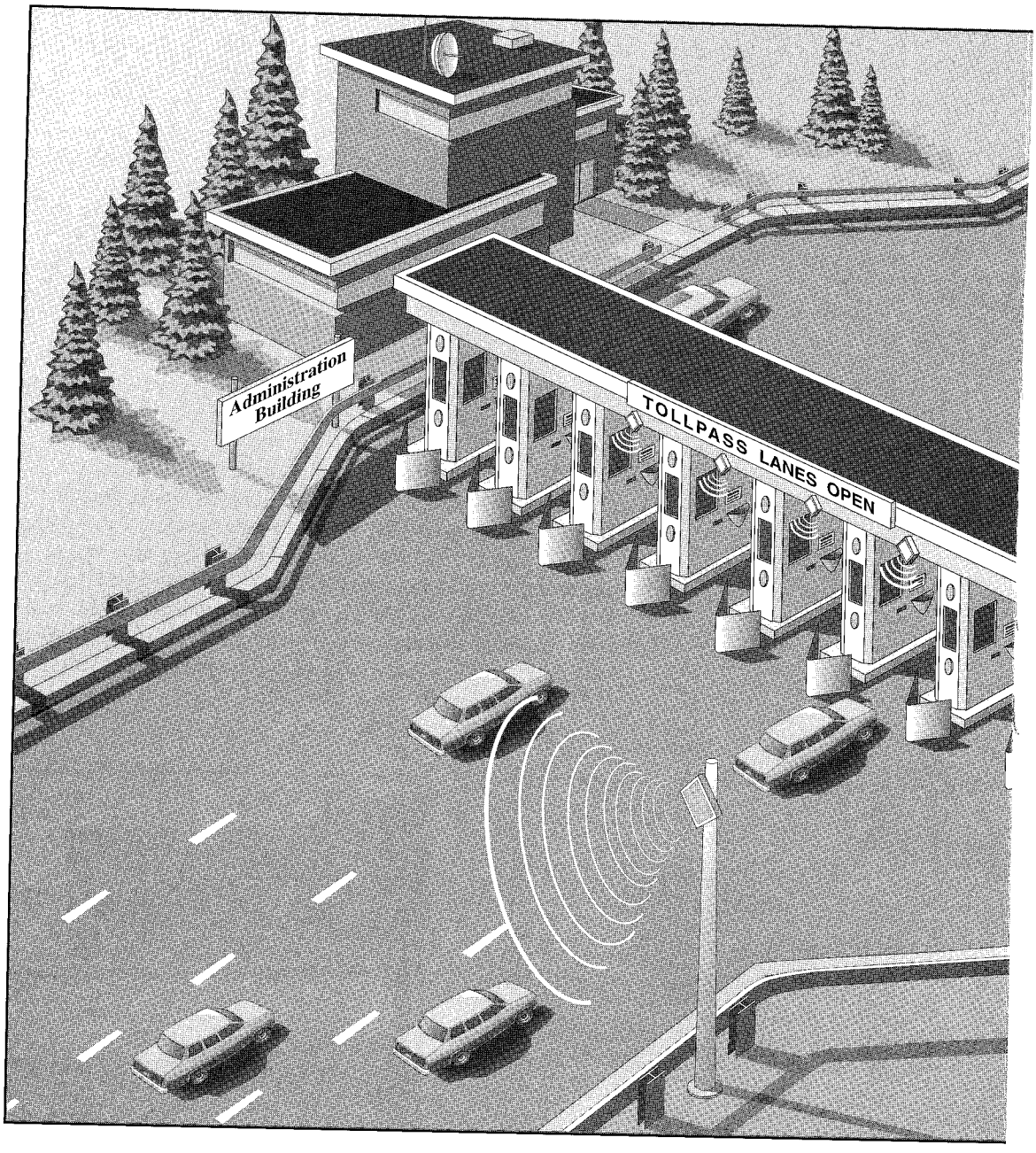
In the most efficient method, the system decentralizes the process for electronic toll collection by incorporating "smart transponders" with unique read-write capabilities. Prepaid account balances for up to 24 different accounts (toll roads, parking lots, etc.) are securely maintained in the memory of the microprocessor-based device.

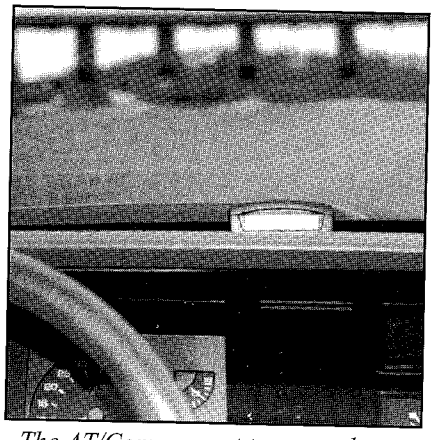
As the motorist passes non-stop through an electronic toll lane, two-way read-write communication instructs the AT/Comm transponder to debit its internally maintained account by the proper toll. Accurate debiting data, transmitted back to the lane reader, is used for reconciliation and audit. Electronic encryption techniques and an independent audit record for each transponder ensures the security of the entire ETC system.

Convenience and safety are integral aspects of the AT/Comm electronic toll collection system. Motorists can ascertain remaining account balances by viewing the visual display on the transponder. An audio alarm on the device warns the motorist of insufficient funds well before the toll plaza, allowing him or her to safely proceed to an appropriate lane. These human interface features are also used in other IVHS applications.

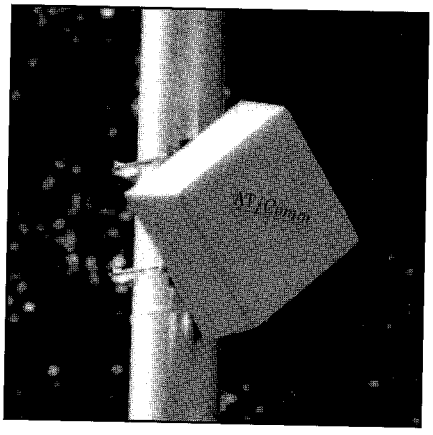
The pioneers of read-write electronic toll systems

Electronic Toll Collection: A Close-Up Look

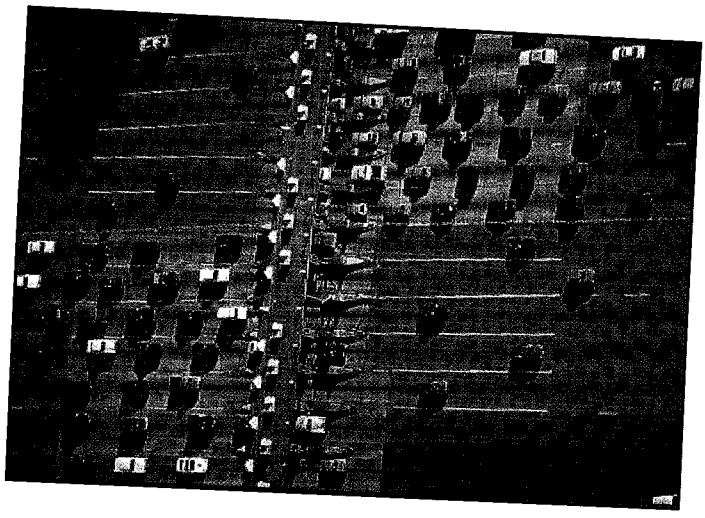


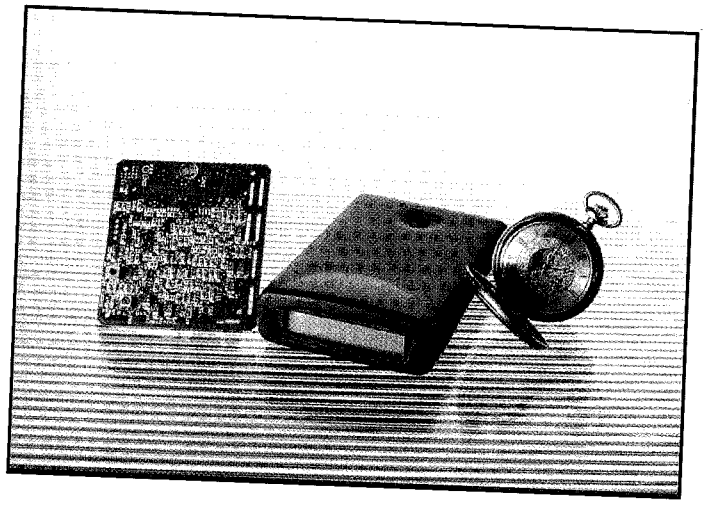


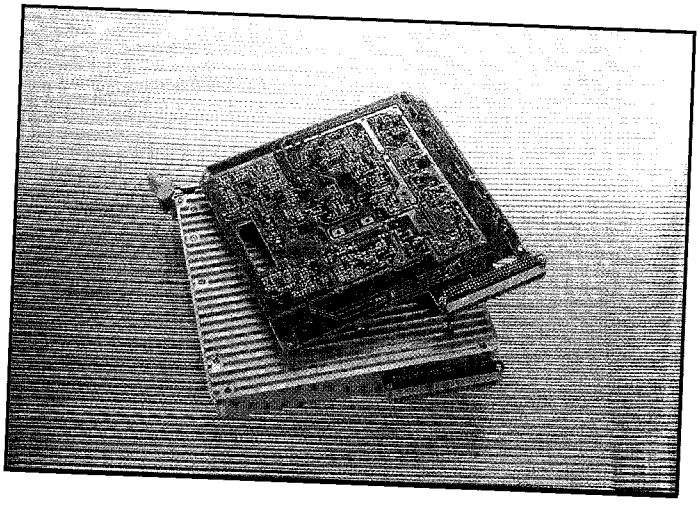
The AT/Comm smart transponder...



receives toll schedule broadcast from T1 antenna.



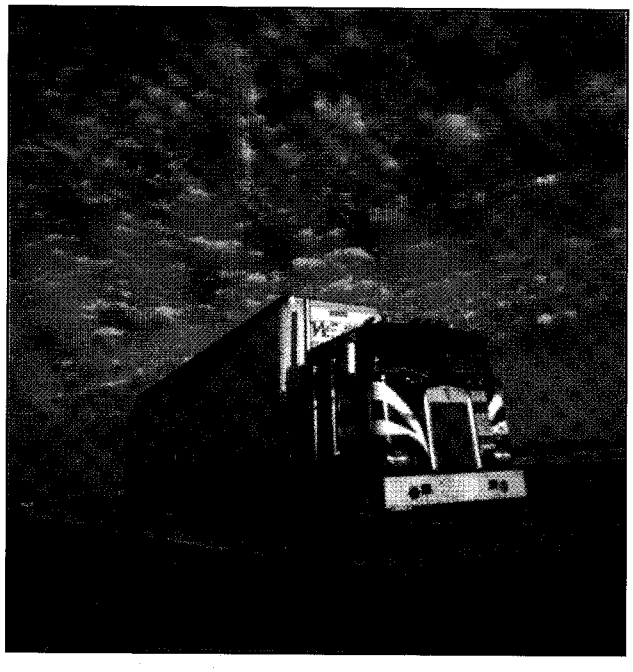




Commercial Vehicle Operations

AT/Comm's read-write smart transponder technology provides commercial vehicle operators with enhanced capabilities beyond first generation AVI tag systems. The transponder's components of a microprocessor, large memory storage, separate receiver/transmitter, multi-line visual display, audio alarm, and keypad for information entry enable new applications previously unavailable.

- Programmable Classification for ETC
- In-Cab Information and Programming
- Weigh-In-Motion
- Vehicle Access and Control
- Driver Guidance
- Service History Maintenance
- Hazardous Materials Management
- Interstate Registration
- Pre- and Post-Classification
- Fuel Management



Far ahead of the technical curve

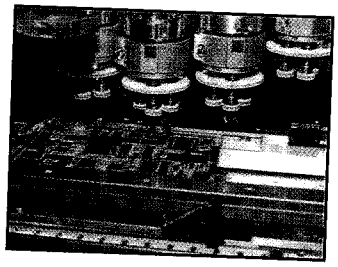
Manufacturing

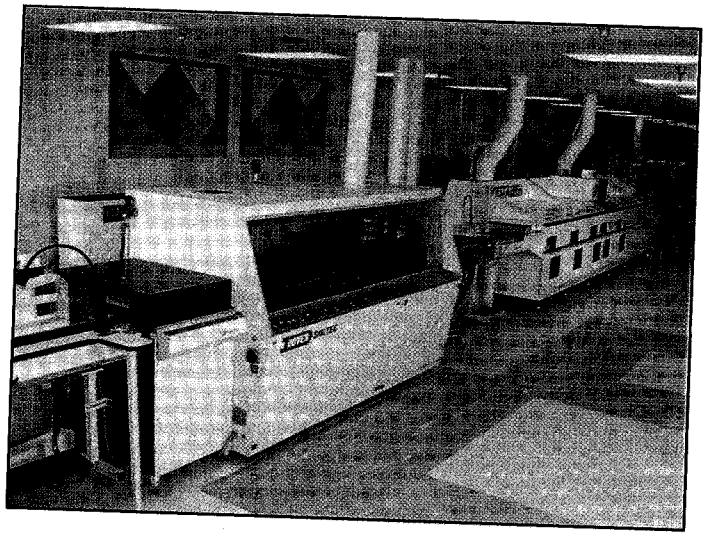
Dover Electronics is an internationally recognized leader in producing high-volume surface-mount electronic assemblies and has advanced manufacturing skills including fine pitch technology, as well as MCM's. The alliance of AT/Comm's engineering talents and Dover Electronics' manufacturing capabilities will continually produce the most advanced products and systems for the needs of the transportation industry worldwide.

"The AT/Comm-Dover team is a spectacular combination of innovation and proven performance. Our investment in this project should provide rewards to both companies. We are very excited to be a participant."

Ron Budacz, Dover Electronics

DOVER
ELECTRONICS COMPANY





Continuing product advancements through the evolution of technology