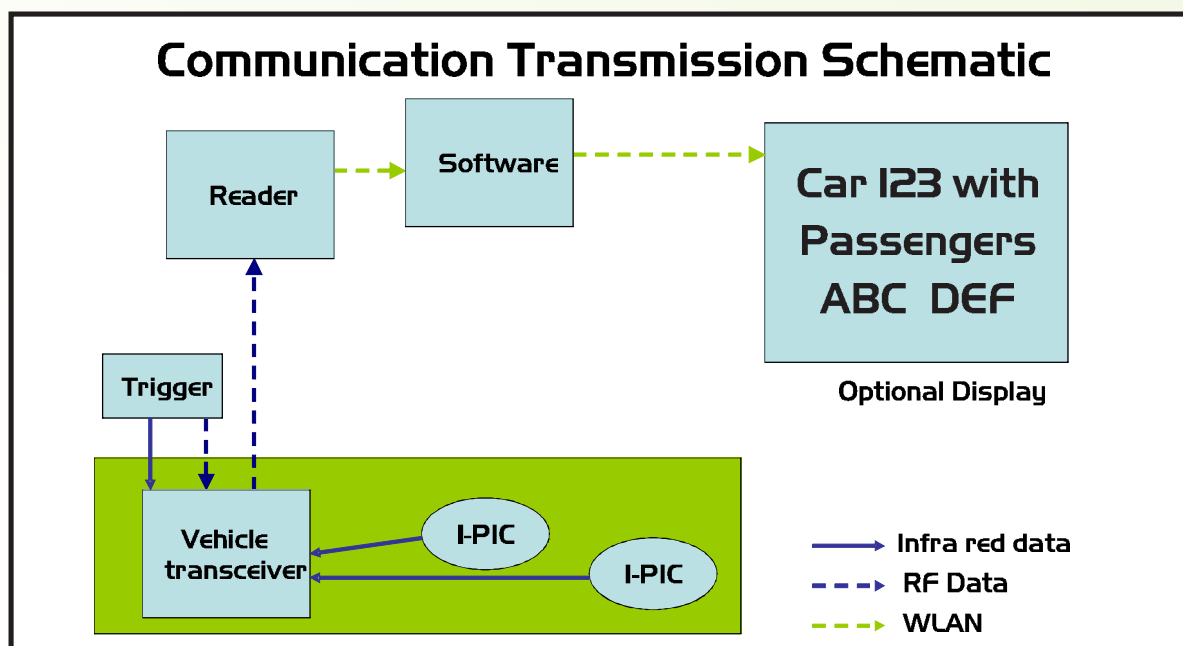


Introducing Trip Convergence Ltd's innovative Occupant Count Verification System (OCVS) for verifying vehicle occupancy in High Occupant Vehicle (HOV) applications.

Designed to increase certainty and reduce enforcement costs for HOV/HOT/Carpool specific facilities, the system incorporates patented technologies to communicate exactly how many people are in the vehicle.

The system uses a combination of Infrared and Radio Frequency Identification (RFID) technologies to identify the people and the vehicle. Individuals are issued with a Squeeze to See Me[®] Infrared Personal Identification Card (I-PIC) that when triggered transmits encoded data to a combination infrared/RFID Vehicle Transceiver, which in turn when triggered relays that information to a local server via 2.45 GHz RFID communication. The I-PIC optionally includes photo identification and back-up barcode information. The I-PIC is activated by a push button switch that, as long as within range, triggers the transmission of an ID number to the vehicle transceiver via infrared (like a TV remote). The push button can be a standard soft switch or optionally utilise biometric fingerprint sensitive technology in which fingerprint details are programmed directly into the I-PIC (not held on a database) and the switch may only be activated by the person to whom the I-PIC was issued.



On entering the vehicle, and or at a later time (depending on the business rules), each individual activates their I-PIC. The identification details of each person is captured by the vehicle transceiver. When the vehicle subsequently passes through a 'trigger zone' the details of the vehicle and its passengers are transmitted via a proprietary 2.45 GHz signal to the RFID reader, which in turn communicates to the local server. The reader/server communication can be either ethernet or WiFi.

Internet capable real time verification procedures are used to guard against counterfeiting of I-PICs. Data from the transmission may optionally be displayed based on lookup capability and using LED screens visible to the participants.

To ensure accuracy in applications where transactions are created between participants (such as flexible carpooling) the vehicle transceiver has push-button clear and reset capability. If the data displayed is not correct the vehicle transceiver can be reset and participants can again trigger their I-PICs and then activate the retransmission button on the vehicle transceiver.

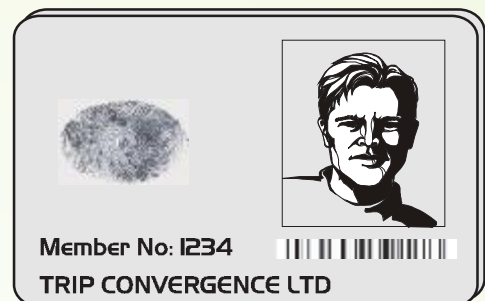
The transceiver retains participant data for a pre-set period that is specific to the application and the location. For example, for flexible carpooling the transceiver may be set to retain data for four hours, enabling use of the data at both the flexible carpooling park and a dedicated carpool parking facility at the destination, but being cleared before the return journey. For HOT lanes the requirement might be for more current data, perhaps as recent as one minute before accessing the HOT facility, in order to be confident that the participants are still in the vehicle when it enters the facility.

APPLICATIONS:

- Flexible Carpooling
- Verification of Occupant Count for HOV and HOT facilities (facilitating non-charging of toll)
- Allocation of differential pricing for HOT lanes depending on the number of passengers.
- Verification of Occupant Count for preferential parking for carpoolers

SQUEEZE TO SEE ME[®] INFRARED PERSONAL IDENTIFICATION CARD

- Encoded Infra Red
- Temperature 40 to 125° C Storage
- -40 to 85°C Operating
- Humidity 100% @50° C
- Vibration: Commercial
- Shock: 2 metre drop to concrete
- Type: Sealed to IP54
- Distance: Up to 2m direct line of sight
- Battery life: Dependent on use up to 5 years
- Biometric sensor



VEHICLE TRANSCIEVER

- Encoded 2.45 GHz RFID
- Temperature 40 to 125° C Storage
- -40 to 85°C Operating
- Humidity 100% @50° C
- Vibration: Commercial
- Shock: 2 metre drop to concrete
- Type: Sealed to IP54
- Distance: Up to 100m
- Battery life: Dependent on use up to 5 years

