

### Features

- Ideal system for networked, mobile applications and static environment
- Latest technology delivers maximum accuracy
- Standard capture area 35 and 55 inches, (90 and 140 cm), optional up to 100 inches (250 cm)
- Open interfaces to RS232, RS485, IBIS-Bus and CAN-Bus
- Modular design
- Vandalism-safe
- Buy America compliant

### Benefits

- Easy to install
- Maintenance free, no need to re-adjust after initial installation

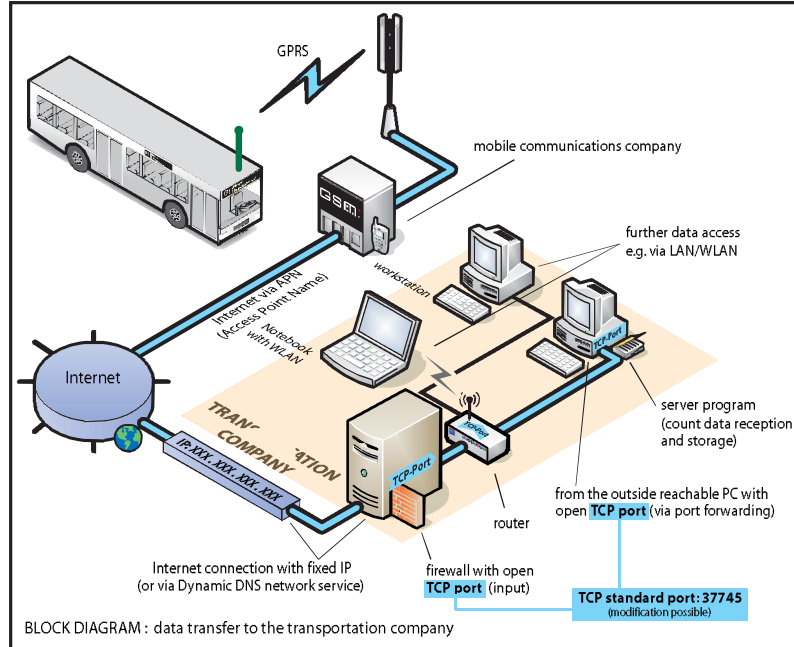
### Introduction

VECOM USA's Automatic Passenger Counting System (APCS-100) is the latest generation of people counting systems and is specifically designed to count passengers on public transport vehicles. The system consists of one or two sensors (PCS-90 or PCS-140, depending on door width) containing customized chip cameras and infrared light emitters. The power supply and a high speed Digital Signal Processor (DSP), which provides real time signal processing, are integrated into the sensor housing. The system uses infrared light which is invisible and harmless to the human eye. The sensor is insensitive to both temperature and sunlight fluctuations. The sensor produces a three-dimensional image of the door area. This enables the sensor to take into account the height of each object it detects, in contrast to width and depth (only) dimensions on which conventional systems rely. The result is a much more reliable, true passenger count, even during peak volume periods.

### Functionality

The sensor's signals are evaluated in real time within the unit. The data is then transmitted to a central processor, which by using GPS/DGPS, determines the location of the vehicle and assigns the data to the correct stop. Existing data paths, (e.g., memory cards, WLAN, GPRS or radio data transmission) can be used to store and transmit the local data. Complete data sets are stored in a central database and are available for tabular or graphical evaluation and reporting. This provides accurate data on transport performance that individual transport companies can customize and analyze according to its specific needs. Examples include: numbers of passengers, miles traveled per passenger, volume per stop and route utilization. The fully automated APCS-100 replaces cumbersome and less reliable spot check systems and provides more accurate data and greater data volumes. The APCS-100 is especially suited for Public Transportation Partnerships who need extremely accurate data to properly determine revenue distributions.

In static environments such as railway stations, airports or shopping centers, the PCS-90 and PCS-140 sensors allow connection to a central processing unit via existing data networks. The central PC can store data by passages and time-of-day allowing for retrieval and sorting of the data into essential time-of-day segments and trending information.



### Specifications

Capture Area	PCS-90 35 inches [90 cm] PCS-140 55 inches [140 cm] Special sizes up to 100 inches [250 cm] upon request
Capture frequency	400 images/sec
Sensitivity to Stray Light	Negligible, since processing images is based on frequency
Error Rate	Less Than 1% (Statistical Average)
Setup	Pre-configured by the manufacturer. Changing parameters can be easily done from the outside of the unit
Self Test	System Status information can be requested via sensor function
CPU	Digital Signal Processor (DSP) Flash-EPROM for easy software update
Interfaces	RS232, RS485, IBIS Vehicle Bus and CAN-Bus
Power Supply	24 VDC (-25/+35%) 0.7 Amp
Environment	Temperature -22 ~ +158 °F (-30 ~ +70 °C), Operating
	Humidity -95% @ 104 °F (+40 °C) (non-condensing), Operating
	Vibration Resistance 1 Grms, IEC 60068-2-64, Random, 5 ~ 500 Hz, 1 Oct/min, 1 hr/axis, Operating
	Shock Resistance 20 G, IEC 60068-2-27, half sine, 11 ms, Operating
Physical Characteristics	Housing Aluminum casing with acrylic glass cover
	Mounting Flush with vehicle ceiling or on vehicle ceiling
	Dimensions (WxHxD) PCS-90: 22.3 x 4.7 x 2.1 inches [567 x 120 x 52 mm] PCS-140: 35.4 x 4.7 x 2.1 inches [900 x 120 x 52 mm]
	Weight PCS-90: 4.63 lbs [2.1kg], PCS-140: 8.16 lbs [3.7 kg]

### Ordering Information

Pricing and ordering information available upon request.

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VECOM USA is proud to be ISO 9001:2000 Certified

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