



We make highways talk™

- **MANAGEMENT**
- **SAFETY**
- **PRESERVATION**

International Road Dynamics Inc. develops and maintains traffic management products and systems technology that make highways talk. What are they saying? They are providing information that roadway administrators need to manage traffic, preserve infrastructure and provide safety warnings to drivers.

IRD's multi-discipline, innovative and customer-focused team is expert in advanced technologies, advanced traffic solutions and custom-designed systems.



**CUSTOMER
DRIVEN™**

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TCC 540 Traffic Counter/Classifier

IRD's TC/C 540 is a portable, battery-operated, multi-lane time interval recording counter and classifier that collects traffic data:

- vehicle count
- classification
- gap
- headway
- speed by axle
- speed by length

Ruggedly constructed to withstand harsh climatic conditions, the TC/C 540 is versatile, user-friendly and flexible. You choose the methods and modes that meet your monitoring needs.

- Count up to 16 lanes
- Classify up to 8 lanes
- 2 count modes (time interval and time-stamped sensor events)
- 3 classification modes (binning, time-stamped sensor events, and individual vehicle records)

APPLICATIONS

Traffic Planning

- Monitor traffic volumes at up to five different interval rates (ranging from one minute to 24 hours) per day

Traffic Profile

- Identify vehicle class based on axle types

Safety

- Determine problem traffic areas based on traffic speed
- Incident Detection and Call Back - can be programmed to report traffic incidents to a central computer, activate a warning sign or message board, and/or report sensor failures

Audit

- Monitor volume, times, and types of vehicles passing through toll operations



TCC 540

Traffic Counter/Classifier

DATA COLLECTION MODES

Counting Modes:

1. Time Interval - collect and sort data by user-defined time intervals
2. Time Stamp - sensor activations (accurate to 1/10695 of a second) stored in memory

Classification Modes:

1. Binning - user definable up to 30 speed, 30 axle, 30 headway and 30 gap bins, FHWA Scheme "F" default
2. Time Stamp - sensor activations (accurate to 1/10695 of a second) stored in memory
3. Individual Vehicle Records (RAW) - time of passage to 1/100 second, speed value to 1/10 mph or kph, number of axles and axle spacing for each vehicle stored in memory (Data for approximately 5000 vehicles can be stored in 68K of memory using this mode)

SPECIFICATIONS

Programming

- From counter keyboard and display
- From IBM compatible computer
- Remotely with telephone modem

Data Collection

- Through telephone modem
- With IBM compatible computer
- With Datahog (Portable Data Collection Device)

Memory

- 1 Mb of counter memory

Telemetry

- Ready with addition of external modem and cellular
- RS-232 port with baud rates from 300 to 19,200

Case

- 10 gauge welded aluminum
- Modular plug-in CMOS electronic circuit boards

Power

- AC power operation
- 6 volt, 12-amp hour rechargeable battery
- Dual battery unit (optional for extra battery life)
- Permanent solar panels (optional)

Operating Temperature

- -40°C to +72°C (-40°F to +165°F)
- 20% to 90% non-condensing relative humidity

Dimensions

- 27 cm x 36 cm x 18 cm (10 3/4 in. x 14 in. x 7 in.)

Weight

- 6.8 kg (15 lbs)

Keyboard/Display

- 16 key watertight keyboard
- 80 character, 4 line liquid crystal display

Sensor Inputs

- Piezoelectric (four or eight)
- DYNAX® (four or eight)
- Road tube (one to eight)
- Inductive Loops (four, eight, twelve or sixteen)
- Remote inputs (eight)



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