

Table 1—Test results of the accuracy of the different counters.

Model	GRP*		BIG*		SML*		LIT*		DARK*		Total Percent	
	under	over	under	over	under	over	under	over	under	over	under	over
Cuesta Systems RS 501	1	0	0	0	0	0	2	0	0	0	6	0
Ivan Technologies Trail Traffic Counter	0	0	0	0	0	0	0	0	0	0	0	0
Diamond Traffic TCS-120	2	0	0	0	0	0	3	0	0	0	10	0
Compu-Tech TR-41 Counter, PIR-70 Sensor	2	1	1	0	1	0	0	0	3	0	14	2
Diamond Traffic TT-3 Counter, TT3-IR Sensor	4	0	1	0	2	1	0	0	4	0	22	2
Compu-Tech TR-41 Counter, PR-40 Sensor	0	3	0	3	0	0	1	0	1	0	4	12
Compu-Tech TR-41 Counter, TSS-32 Sensor	1	2	0	2	0	0	0	0	1	0	4	8
Diamond Traffic TT-3 Counter, TT-SS Sensor	4	2	0	1	2	0	1	0	0	1	14	8

\* **GRP**: Closely spaced groups; **BIG**: Heavier hiker than average (for seismic counters); **SML**: Lighter hiker than average (for seismic counters); **LIT**: Reflective clothing (for active infrared counters); **DARK**: Dark, matte clothing (for passive infrared counters).

Table 2—Evaluation of the trail traffic-counter features.

Model	Cost	Weight pounds (kg)	Size inches (cm)	Battery type and life	Internal data logger	Installation	Accuracy	Vandal resistance
<b>ACTIVE INFRARED</b>								
Cuesta Systems RS-501	\$595	7 lb (3.2 kg)	11.5x7x6.5 (28.5x18x16.5)	4 C alkaline or 2 C lithium, 12 to 18 months	None	Average	Good	Average
Cuesta Systems TS-601	\$755	7 lb (3.2 kg)	11.5x7x6.5 (28.5x18x16.5)	4 C alkaline or 2 C lithium, 12 to 18 months	3 options—see text	Average	Good	Average
Diamond Traffic TTC-442	\$420	8 lb (3.6 kg)	10x3x7 (25.5x7.5x18)	4 C alkaline, 12 to 15 months	512 selectable time intervals	Not evaluated	Not evaluated	Not evaluated
Ivan Technologies Trail Traffic Counter	\$995 (\$1195 with data logger)	6.7 lb (3.0 kg) for receiver and transmitter	6.25x6.25x4 (16x16x10) for receiver and transmitter	8 D alkaline, 180 days 2 N alkaline, 4 years or lithium, 270 days and 10 years	Optional time-and-date stamp	Average	Very good	Good
TrailMaster TM1000	\$205	1 lb (0.45 kg) receiver 0.63 lb (0.28 kg) transmitter	7.5x3.5x2.1 (19x9x5) receiver 4.75x3.25 x1.8 (12x8x4.5) transmitter	8 C alkaline, 30 to 90 days	Date and time stamp of 1,000 events; 4,000 or 8,000 events optional	Not evaluated	Not evaluated	Not evaluated
TrailMaster TM1500	\$260	1 lb (0.45 kg) receiver 0.63 lb (0.28 kg) transmitter	7.5x3.5x2.1 (19x9x5) receiver 4.75x3.25x1.8 (12x8x4.5) transmitter	8 C alkaline, 30 to 90 days	Date and time stamp of 1,000 events; 4,000 or 8,000 events optional	Not evaluated	Not evaluated	Not evaluated
<b>PASSIVE INFRARED</b>								
Compu-Tech TR-41 Counter PIR-70 Sensor	\$347	4.5 lb (2.0 kg)	12x4 dia. (30.5x10 dia.)	4 D alkaline, 1 year	None	Easy	Poor	Good
	\$189	1.1 lb (0.5 kg)	3x3x6 (7.5x7.5x15)	3 AA alkaline, 2 years				
Diamond Traffic TT-3 Counter TT-3-IR Sensor	\$210	2 lb (0.9 kg)	3x3.5x5.375 (7.6x8.9x14)	3 C alkaline or 2 3.5-volt lithium	None	Easy	Very poor	Good
	\$179	1.6 lb (0.7 kg)	6x1.75 dia. (15x4.5 dia.)	2 3.5-volt lithium, 5 years				
TrailMaster TM300	\$130	0.75 lb (0.34 kg)	4.75x3.25x3.25 (12x8.25x8.25)	4 C alkaline, 1 year	Date and time stamp of 1,000 events; 4,000 or 8,000 events optional	Not evaluated	Not evaluated	Not evaluated
TrailMaster TM550	\$180	0.75 lb (0.34 kg)	4.75x3.25x3.25 (12x8.25x8.25)	4 C alkaline, 1 year	Date and time stamp of 1,000 events; 4,000 or 8,000 events optional	Not evaluated	Not evaluated	Not evaluated
<b>SEISMIC</b>								
Compu-Tech TR-41 Counter TSS-32 Sensor	\$347	4.5 lb (2.0 kg)	12x4 dia. (30.5x10 dia.)	4 D alkaline, 1 year	None	Difficult	Average	Very good
	\$72		48x32 (122x81)					
Compu-Tech TR-41 Counter PR-40 Sensor	\$347	4.5 lb (2.0 kg)	12x4 dia. (30.5x10 dia.)	4 D alkaline, 1 year	None	Average	Poor	Very good
	\$73		48 long (122 long)					
Diamond Traffic TT-3 Counter TT-3-SS Sensor	\$210	2 lb (0.9 kg)	3x3.5x5.375 (7.6x8.9x14)	3 C alkaline or 2 3.5-volt lithium	None	Easy	Very poor	Very good
	\$109	1.0 lb (0.45 kg)	3x1.5x5 (7.5x3.8x12.7)					
<b>INDUCTIVE LOOP BICYCLE</b>								
Diamond Traffic TT-7	\$298	8 lb (3.6 kg)	8.5x8.5x4 (21x21x10)	6 D alkaline, 16 months	None	Not evaluated	Not evaluated	Not evaluated