



City of Ketchum

### CITY COUNCIL MEETING AGENDA MEMO

Meeting Date:  Staff Member/Dept:

Agenda Item:

Recommended Motion:

Reasons for Recommendation:

- The city installed three new pedestrian rapid flashing beacons for the bike path on Warm Springs last year. The city has received positive feedback regarding the level of illumination to drivers when activated.
- The city has also received feedback from the public that there is a low compliance level with bikers pushing the activation button. Staff installed training signs in the spring to encourage pushing the button but has not seen an increase in compliance.
- Staff is recommending the installation of a sensor system on both sides of the crosswalk that can be set up in a custom manner to trigger the crosswalk lights without having to push the button. The vendor has physically visited the site and has assured the avoidance of false-positive for those coming from or headed to Lewis Street on the bike path.
- Pricing determined by “piggybacking off” State of Washington Master Contract 04616, as Idaho did not offer negotiated contract, we could use for the parts needed.
- Installation to be done by City staff and electrician.

Sustainability Impact:

Financial Impact:

Attachments:

- |  |
|--|
| 1. CT Johnson Quote                        |
| 2. Purchase Order 24019                    |
| 3. Email – Details and Product Description |
| 4. Sensor Specifications Sheet             |



# Quotation

CT NORTHWEST (dba of KAR-GOR INC)  
 PO BOX 54, TILLAMOOK, OR 97141  
 503-315-9899 (FAX 503-315-9913)  
 DAVID SHAHON [dauids@kargor.com](mailto:dauids@kargor.com)

Date 9/27/2023  
 Quotation # **MAY-23-019 REV**  
 Quote Good For: 30 days

**Quotation For**

Jade Riley  
 CITY OF KETCHUM  
[jriley@ketchumidaho.org](mailto:jriley@ketchumidaho.org)

Quotation valid until: 10/27/2023  
 Prepared by: David

**Comments or Special Instructions**

Please note: Quoted pricing is effective for 30 days from date of quote. After 30 days, please contact us for updated pricing. CT Northwest does not guarantee pricing more than 30 days. Final pricing will be determined upon release for shipment. We apologize for this inconvenience, but our costs are currently highly erratic and we must base our sell price on our purchase prices. Thanks for understanding.

AGENCY	INTERSECTION (ARTERIAL / SIDE STREET)	BID DATE
CITY OF KETCHUM	WOOD RIVER TRAIL CROSSING @ WARM SPRINGS RD	
FREIGHT		TERMS
FOB JOBSITE	CONTRACT # 04616	NET 30 DAYS

QUANTITY	PART NUMBER	DESCRIPTION	UNIT PRICE	LINE TOTAL
2	PN: 7250-195	FLIR TRAFIONE 195	\$ 1,851.74	\$ 3,703.48
2	PN: 7250-187	FLIR POE INTERFACE (ONE PER SENSOR) (PN: 10-7320)	\$ 358.02	\$ 716.04
2	PN:2285-411	5 AMP, 48V POWER SUPPLY, BREAKER, FUSE, KIT ON DIN RAIL	\$ 211.34	\$ 422.68
1	PN: SUPPORT	SITE SETUP AND TRAINING	\$ 600.00	\$ 600.00
		** CAT6 CABLE NOT INCLUDED IN PRICE QUOTE		
		** LEAD TIME IS APROX 60-90 DAYS UPON RECEIPT OF PURCHASE ORDER		
		WSDOT DES FEE AT 0.76%		\$ 41.36

CREDIT CARD ORDERS WILL INCURE A 3% SURCHARGE TO THE INVOICED AMOUNT

Subtotal	<b>\$ 5,483.56</b>
Tax Rate	\$ -
<b>TOTAL</b>	<b>\$ 5,483.56</b>

**NOTE: STATE LAB FEES & SALES TAX NOT INCLUDED.**

**IT IS THE RESPONSIBILITY OF THE CUSTOMER TO SEND ANY ITEMS THAT REQUIRE TESTING TO THE STATE LAB**  
 THIS IS A QUOTATION ON THE GOODS NAMED, SUBJECT TO CT NORTHWEST STANDARD TERMS AND CONDITIONS.  
 TO ACCEPT THIS QUOTATION, PLEASE REMIT PURCHASE ORDER TO CT NORTHWEST.



**CITY OF KETCHUM**  
 PO BOX 2315 \* 191 5TH ST. \* KETCHUM, ID 83340  
 Administration 208-726-3841 (fax) 208-726-8234

**PURCHASE ORDER**  
 BUDGETED ITEM? \_\_\_ Yes \_\_\_ No

**PURCHASE ORDER - NUMBER: 24019**

<b>To:</b> 6095 CT NORTHWEST PO BOX 54 TILLAMOOK OR 97141	<b>Ship to:</b> CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
---	---

P. O. Date	Created By	Requested By	Department	Req Number	Terms
09/29/2023	BANCONA	BANCONA	Administration	0	

Quantity	Description	Unit Price	Total
1.00	CROSSING SENSOR EQUIP. WOODRIVER&W 03-4193-9930	5,483.56	5,483.56
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		5,483.56

\_\_\_\_\_  
 Authorized Signature

**From:** David Shahon <[davids@kargor.com](mailto:davids@kargor.com)>  
**Sent:** Friday, August 25, 2023 11:49 AM  
**To:** Trent Donat <[TDonat@ketchumidaho.org](mailto:TDonat@ketchumidaho.org)>  
**Cc:** Jade Riley <[jriley@ketchumidaho.org](mailto:jriley@ketchumidaho.org)>  
**Subject:** RE: Thank you and Follow-up Questions

Hi Trent,

I am not surprised that radar is not working for a pedestrian crossing. Radar gets too many reflections and false artifacts that does not work for pedestrians. We have seen radar fail in the past and this is not new. We sell radar, but not for this application.

The thermal sensor is similar to a camera in that it looks in a direction and you can see what it is looking at. We can set up detection points, zones, by direction, area and size. We can ignore small objects, like a dog or bird, we can place directional arrows to track and identify where they are going. On the north side of the warm springs crossing, there is a challenging area because people walk around the curve, then either turn or go straight across, this will take some finesse, but I think the directionality will work and help reduce any false calls if someone's intention is to stay on the sidewalk.





A little hard to draw in a 2d drawing the area of focus, but hopefully those pictures give you some idea. The sensor has a 95 degree field of view, so very wide angle view.

On this page on our website there are some pedestrian detection videos – just scroll down the page to find them:

<https://www.ct-grp.com/videos>

The quoted amount is for 2 sensors, power supplies, installation, etc. The only item not included is CAT6 wire. We also do not have a bucket truck or that type of install, we need someone to mount the system, then we help them aim and configure. Your city maintenance people can help with the install.

We are approved by ITD on their QPL, but there is no other buying program, etc.

This product has a 2 year warranty.

Thanks,

**David Shahon**  
**CT - Northwest**  
**Pacific Northwest Regional Sales Manager**  
PO Box 54  
Tillamook, OR 97141



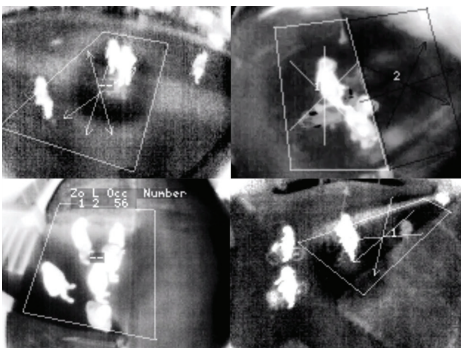


## SMART CITY SENSOR

# TRAFIONE

TrafiOne is an all-round detection sensor for traffic monitoring and dynamic traffic signal control. Offered in a compact and affordable package, the TrafiOne uses thermal imaging and Wi-Fi technology to adapt traffic signals based on the presence detection of vehicles, bicycles and pedestrians, while also generating high resolution data at intersections and in urban environments. As a result, TrafiOne helps traffic engineers improve traffic flows, monitor congestion, enhance safety for vehicles and vulnerable road users, collect data, and measure travel and delay times for different transport modes.

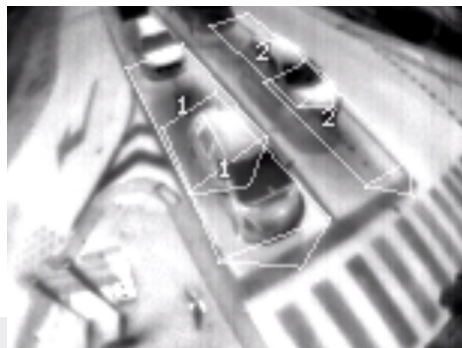
[www.flir.com/Traffic](http://www.flir.com/Traffic)



### Thermal Imaging Sensor

TrafiOne allows for more dynamic control of traffic signals 24/7.

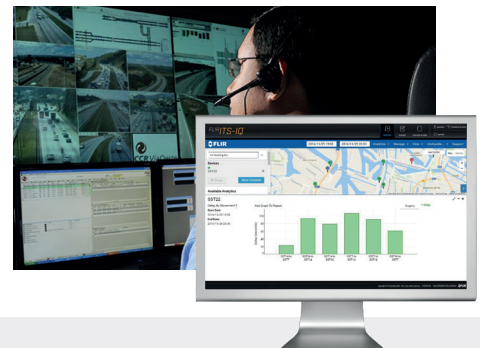
- Sees traffic in total darkness, through shadows and sun glare
- Detects the presence of vehicles and bicyclists at the stopbar
- Detects pedestrians and bicyclists in the crossing or on the curb
- Connects to traffic signal controller via dry contact outputs or TCP/IP network communication



### Wi-Fi Technology

Secure wireless communication allows for quick and easy configuration of detection zones.

- Monitors Mac addresses of Wi-Fi enabled devices, such as smartphones
- Determines travel and route times along road segments
- Measures queue delay times at intersections via Wi-Fi signal strength



### FLIR ITS-IQ

TrafiOne information is processed using cloud-based data analysis.

- FLIR ITS-IQ provides critical understanding of road network performance
- Smart analytics transform information into useful traffic insights
- User-friendly dashboard lets traffic engineers generate reports and take measures, when needed

## TECHNICAL SPECIFICATIONS

System Overview	
Functionalities	Curbside and on-crossing pedestrian and bicycle presence detection Visual HD streaming video (optional license) Stopbar vehicle and bicycle presence detection (optional license) Wi-Fi monitoring (optional license) Pedestrian counting (optional license)
# detection zones	8 vehicle presence zones 8 pedestrian presence zones
Configuration	Web page via secure Wi-Fi or Ethernet
Thermal Sensor	
Resolution	160 x 120
Frame rate	9 FPS
Detector type	Focal Plane Array (FPA) uncooled VOx microbolometer LWIR sensor, 8 to 14 μm wavelength
Streaming Video	RTSP
Compression	H.264, MPEG-4
Visual Sensor	
Resolution	1080 x 1920 HD color CMOS
Frame rate	30 fps
Lens HFOV	95°
Streaming Video	RTSP
Compression	H.264, MPEG-4, MJPEG
Housing	
Material	Aluminum housing with PC GF10 sunshield
Bracket	PA GF30 mounting clamps and aluminum tube
Power, outputs, communication	
Input power	12 – 42 V AC/DC
Power consumption	Average 6 Watt, peak 7 Watt
Outputs	1 N/O and 1 N/C dry contacts direct 16 N/C dry contacts via TI BPL2 or TI BPL2 EDGE interface
Ethernet	10/100 MBps
PoE	PoE A and PoE B
Powerline Communication	Up to 2 MBps via TI BPL2 or TI BPL2 EDGE interface
Wi-Fi	IEEE 802.11 type b,g,n EIRP < 100mW
Environmental	
Shock & Vibration	NEMA TS2 specs
Materials	All weatherproof UV-resistant
IP Rating	IP67
Temperature range	-40°C to +60°C / -40°F to +140°F /
FCC	FCC part 15 class A
Regulatory	
EU Directives	EMC 2014/30/EU, RoHS 2011/65/EU

Product specific	TrafiOne 195	TrafiOne 156
Part number	10-7070	10-7075
HFOV	95°	56°
Detection distance (depending on installation height)	vehicle & bicycle presence: 0 - 20m, 0 - 65.6ft pedestrian & bicycle presence: 0 - 12m, 0 - 39ft	vehicle & bicycle presence: 10 - 35m, 33 - 115ft pedestrian & bicycle presence: 10 - 25m, 33 - 82ft
Installation height	3.5 - 6m / 11.4 - 19.6ft	5.5 - 8m / 18 - 26ft

Specifications are subject to change without notice. For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)

**CORPORATE HEADQUARTERS**  
FLIR Systems, Inc.  
27700 SW Parkway Ave.  
Wilsonville, OR 97070  
PH: +1 877.773.3547

**FLIR ITS**  
Hospitaalweg 1B  
B-8510 Marke  
Belgium  
PH: +32 (0)56 37 22 00

[www.flir.com](http://www.flir.com)  
NASDAQ: FLIR

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2018 FLIR Systems, Inc. All rights reserved. (Created 10/18)

18-1976-ITS\_US



The World's Sixth Sense®