

TECHNICAL SPECIFICATIONS TRAFICAM WIRELESS 915 MHZ

Note: a wireless system consists of a 4TI interface and at least 2 TrafiCam Wireless units

HARDWARE:

In General:

- Camera & detector board integrated in compact, esthetical housing
- Material:
 - Housing:
 - Front & Back Shell: Painted semi sphere of polycarbonate
 - Mid Section: Fiber reinforced polyamide
 - Mounting Bracket:
 - Mounting Device: U-profile (L = 18 cm) of fiber reinforced polyamide (steel bands or bolts to be used for fixation)
 - Clamps for TrafiCam & Mounting Device: 2 tube clamps of fiber reinforced polyamide
 - Connection TrafiCam - Mounting Device: Tube (L = 25 cm, Ø = 13 mm) of aluminum
- Mass ≈ 600 g (excl. cable; sensor ≈ 300 g, mounting bracket ≈ 300 g)
- Height x Width x Depth (max. dimensions, incl. mounting bracket)
 - Vertically Mounted ≈ 45 cm x 16 cm x 10 cm
 - Horizontally Mounted ≈ 41 cm x 18 cm x 10 cm
- Diameter Sphere: ≈ 10cm
- Temperature Range: from -34°C to +80°C
- Humidity: up to 95% non-condensing



Camera Details:

- Camera Type:
 - Technology: Black & White CMOS
 - Sensor Size: 1/3"
 - Resolution: 640 x 480 pixels
 - Frame Rate: 30 FPS
- Lens Types:
 - Wide Angle (Product Reference Number: 10-6032):
 - Focal Distance = 3,0 mm
 - Field of View: Horizontal: 95°, Vertical: 65°, Corner to corner: 103°
 - Narrow Angle (Product Reference Number: 10-6033):
 - Focal Distance = 8,0 mm
 - Field of View: Horizontal: 32°, Vertical: 22°, Corner to corner: 39°

Communications:

- RS-485 for configuration, viewing, checking communication quality and output generation
- Architecture:
 - 1 "master" module that is physically (i.e. hard-wired) connected to interface 4TI
 - 1-4 "slave" modules that communicate(s) with the master module
 - Each TrafiCam Wireless can be used as a master or a slave (no hardware/software settings)
- Operating modes: standard transmitter/receiver (i.e. transceiver)
- Type of communications: wireless extension RS-485 (RS-485 in/out)
- Protocol: Traficon protocol

- **Details Wireless 915 MHz Frequency Band (USA, Canada, Mexico, ...):**
 - o Technology: Frequency Hopping Spread Spectrum (FHSS)
 - o Frequency Range: 902-928 MHz
 - o Available Hop Patterns: 6 (so 6 channels available)
 - o Transmission power (ERP): 250 mW
 - o Max. communications distance: max. 300 m* omni-directional
 - o Effective bandwidth: 115,2 kbaud netto*
 - o Input Voltage: 14-26 VAC/DC
 - o Current Consumption: ≤ 75 mA @ 24 VDC
 - o Power Consumption: Peak $\leq 1,8$ W, Average $\leq 1,5$ W
 - o Certification: FCC chapter 47 part 15
 - o Antenna: omni-directional

* In ideal conditions: direct line of sight, no fixed (trees/leaves, power lines, buildings, etc.) and/or moving objects in Fresnel zone (buses, trucks, trams, etc.), good weather, normal traffic environment, no interference, 250 mW transmission power, height ≥ 5 m above the ground's surface

REGULATORY ISSUES:

- **EMC:** Electromagnetic Compatibility - 2004/108/EG
- **FCC:** FCC Part 15 Class A
- **Shock & Vibration:** NEMA II specs
- **Materials Weatherproof (UV-resistant) and Housing Waterproof to IP67**

SOFTWARE:

- **Configuration & Monitoring (verification):** via TRAFICAM PC TOOL on portable PC, via 4TI interface
 - o Detection zones: Max. 8 "Virtual Loops" per TrafiCam (can be made direction sensitive)
 - o Output Assignment:
 - Assign max. 4 outputs per TrafiCam
 - Assign 1 output to multiple zones (logical functions: and, or)
 - Select "close on event" (= default setting) or "open on event"
 - o Snapshot (single JPEG image)
 - o Video (JPEG images refreshing): Refresh detection zone or complete image
- **Recording:** via TRAFICAM RECORDER TOOL on a portable PC and via interface
- **Playback:** via TRAFICAM PLAYBACK TOOL on a (portable) PC

CONNECTION TRAFICAM – 4TI:

- **Recommended Type of Cable:** Shielded Twisted Pair (STP), UV resistant
- **Required Number of Wires:** 4 wires + shielding
- **Minimum / Maximum Wire Diameter:** 0,3 mm / 2 mm
- **Minimum / Maximum Cable Diameter:** 5 mm / 9,2 mm (Determined by the cable gland of the TrafiCam)
- **Maximum Cable Length:** 300 m (Highly depends on cable quality and local conditions, i.e. local sources of interference. Note that there can be a significant voltage drop over long distances)
- **Note:** cable is not standard included

YOUR CONTACT