













## Features

-  **Standardized Interface**  
All **TRADO Series Radios** utilize the same software interface reducing training time, reducing configuration time and increasing configuration capabilities
-  **Router Functions**  
**TRADO Series Radios** can be configured as feature rich routers, Access Points, Repeaters, Client Premise Equipment, Mesh nodes, etc
-  **Multi-Ethernet Port**  
Models available with 1, 3 or 9 10/100 Ethernet ports.
-  **Multi-Radios**  
Models available with 1 or 2 internal radios in several licensed and un-licensed bands.
-  **Multi-mode**  
The **TRADO Series Radios** offer multi-mode operation for maximum configuration and applications. 802.11a/b/g/n, 802.16, Mesh in single radio and dual radio configurations.
-  **Indoor / Outdoor**  
Both indoor and outdoor radio options are available
-  **Versatile Power Input**  
10-28VDC power input via ¼ inch jack or PoE.
-  **Weather Resistant**  
Waterproof outdoor enclosure allows installation in virtually any environment.
-  **Energy efficient**  
Low power consumption and low heat
-  **TDMA Analogous Protocol**  
Time Division Multiple Access Protocol manages Point-to-Multi-point data transfer preventing collisions and video jitter.
-  **Data Security**  
40 and 128 bit WEP, WPA, and WPA2 support, AES
-  **Layer 2 and Layer 3**  
Supports Layer 2(MAC) and Layer 3 networking

## IP Video MOD-BOX Camera System Series

**The most adaptable outdoor camera systems in the world!**



## Overview

*WECU Surveillance.com* has created the most dynamic and versatile outdoor camera system series in the world. The MOD-BOX Camera Series has literally thousands of configuration possibilities from a single camera to eight (8) mixed model cameras in a single MOD-BOX system. Mounting options are equally as dynamic from wall mounting to 14 foot tall Schedule 40 aluminum poles to steel towers over 300 feet tall. Communications options are extensive and cover all means of moving IP data including all licensed and unlicensed wireless frequencies from 900MHz into Microwave frequencies.

The MOD-BOX will support third party cameras, IP encoders, recorders, analytics, and communications equipment. Contact WECU Surveillance.com for more details.

## Camera Options

Configuration of desired options into a functional solution is complex process mastered by our in-house design team. It is required that customers contact the in-house design team to assemble the desired options into a MODBOX Camera system to ensure all technical aspects are properly addressed in the configuration and design. MODBOX solutions are designed at no charge and within 48 hours of configuration requirements being provided.

<b><u>High-End Long Range Cameras with Variable Beam Dispersion Laser Infrared Illuminator - Fog buster camera can see through fog, smoke, mist, haze in the daytime</u></b>
12.5-750mm motorized zoom lens, Fog buster Camera with wiper, 3000 meter Variable Beam Dispersion Infrared Laser – suitable for high security systems where day time surveillance out to 5000 meters and night time surveillance out to 3000 meters is required.
30-750mm motorized zoom lens, Fog buster Camera with wiper, 2000 meter Variable Beam Dispersion Infrared Laser – suitable for high security systems where day time surveillance out to 4000 meters and night time surveillance out to 2000 meters is required.
23-500mm motorized zoom lens, Fog buster Camera with wiper, 1500 meter Variable Beam Dispersion Infrared Laser – suitable for high security systems where day time surveillance out to 3000 meters and night time surveillance out to 1500 meters is required.
17-370mm motorized zoom lens, Fog buster Camera with wiper, 1000 meter Variable Beam Dispersion Infrared Laser – suitable for high security systems where day time surveillance out to 2000 meters and night time surveillance out to 1000 meters is required.
11-200mm motorized zoom lens, Fog buster Camera with wiper, 500 meter Variable Beam Dispersion Infrared Laser – suitable for high security systems where day time surveillance out to 1000 meters and night time surveillance out to 500 meters is required.
<b><u>High-end Long Range Color / Thermal Cameras - Fog buster camera can see through fog, smoke, mist, haze in the daytime</u></b>
23-500mm motorized zoom lens, Fog buster Camera and 75-150mm motorized zoom Thermal Camera both mounted on a Pan Tilt mount – suitable for high security systems where day time surveillance out to 3000 meters and Thermal surveillance out to 1500 meters is required
17-370mm motorized zoom lens, Fog buster Camera and 20-100mm motorized zoom Thermal Camera both mounted on a Pan Tilt mount – suitable for high security systems where day time surveillance out to 2000 meters and Thermal surveillance out to 1000 meters is required.
<b><u>High-end Medium Range Color / Short Range Thermal Cameras</u></b>
36x Optical (3.4-122mm) Day/Night Color camera with wiper and 50mm Thermal Camera on Pan Tilt mount– suitable for high security systems where day time surveillance out to 1000 meters and night time surveillance out to 500 meters is required.
36x Optical (3.4-122mm) Day/Night Color camera with wiper and 20mm Thermal Camera on Pan Tilt mount– suitable for high security systems where day time surveillance out to 1000 meters and night time surveillance out to 200 meters is required.
<b><u>High-End Medium Range Cameras with Variable Beam Dispersion Laser Infrared Illuminator</u></b>
3.4-122mm (36x) zoom Sony Camera module with wiper, 400 meter Variable Beam Dispersion Infrared Laser on Pan Tilt mount – suitable for high security systems where day time surveillance out to 1000 meters and night time surveillance out to 400 meters is required.
3.8-99mm (26x) zoom Sony Camera module with wiper, 300 meter Variable Beam Dispersion Infrared Laser on Pan Tilt mount – suitable for high security systems where day time surveillance out to 800 meters and night time surveillance out to 300 meters is required.
4.1-73mm (18x) zoom Sony Camera module with wiper, 200 meter Variable Beam Dispersion Infrared Laser in Pan Tilt dome mount – suitable for high security systems where day time surveillance out to 600 meters and night time surveillance out to 200 meters is required.
<b><u>Speed Domes– suitable for short range security applications where day and night viewing with ambient light</u></b>
3.5-129.5mm (37x) Samsung Optical zoom, 12x digital zoom PTZ Speed Dome
3.4-122mm (36x) Sony Optical zoom, 12x digital zoom PTZ Speed Dome camera
3.84-88.4mm (23x) Samsung Optical zoom, 10x digital zoom PTZ Speed Dome
4.1-73.8mm (18x) Sony Optical zoom, 12x digital zoom PTZ Speed Dome camera
3.8-38mm (10x) Samsung Optical zoom, 10x digital zoom Mini PTZ Speed Dome
<b><u>Fixed Cameras</u></b>
1.3mm (125°H) Fixed zoom , DC Iris, IR Lens, 1.3Mega-Pixel, H.264 IP Professional Camera in Polycarbonate Enclosure with heater/blower
1.67mm (110°H) Fixed zoom , DC Iris, IR Lens, 1.3Mega-Pixel, H.264 IP Professional Camera in Polycarbonate Enclosure with heater/blower
8-80mm, Manual zoom/focus, 1.3Mega-Pixel, H.264 IP Professional Camera in Polycarbonate Enclosure with heater/blower
3-8mm, Manual zoom/focus, 1.3Mega-Pixel, H.264 IP Professional Camera in Polycarbonate Enclosure with heater/blower
3.3-99mm (30x) Samsung Optical zoom, 10x digital zoom, fixed position camera with 100 meter LED IR illumination
3.84-88.4mm (23x) Samsung Optical zoom, 10x digital zoom, fixed position camera with 100 meter LED IR illumination
License plate capture camera, 10-40mm lens, 5-30 meter distance, up to 180 km/h
License Plate capture camera, 9-22mm lens, 2-15 meter distance, up to 45km/h
9-22mm manual zoom, 40-50m LED IR, 540TVL, Fixed Camera
9-22mm manual zoom, 40-50m LED IR, 470TVL, Fixed Camera
5-55mm manual zoom IR F1.4 Lens, 580TVL Professional Camera in Polycarbonate Enclosure with heater/blower

## LED Infrared Illumination Options

20 Meter IR Range, 120 degrees, 940nm
40 Meter IR Range, 120 degrees, 850nm
45 Meter IR Range, 60 degrees, 940nm
55 Meter IR Range, 45 degrees, 940nm
65 Meter IR Range, 25 degrees, 940nm
80 Meter IR Range, 60 degrees, 850nm
110 Meter IR Range, 45 degrees, 850nm
130 Meter IR Range, 25 degrees, 850nm
180 Meter IR Range, 40 degrees, 850nm

## IP Encoding/Recording Options

Firmus Ruggedized Mobile PC, 8 cameras high resolution with internal hard drive
Firmus Ruggedized Mobile PC, 4 cameras high resolution or 8 cameras standard resolution with internal hard drive
Novo IP encoder 4 camera, standard resolution with internal hard drive
Novo IP Encoder 1 camera high resolution with internal hard drive
Novo IP encoder 4 camera, standard resolution
Novo IP encoder 1 camera, high resolution

## Communication Options

Wireless (Single Radio)
Wireless (Dual Radio- used as repeater or Wi-Fi hotspot)
Wireless (Single Radio) with cellular connection port
Wireless (Dual Radio - used as repeater or Wi-Fi hotspot) with cellular connection port
Long Range and/or High throughput Microwave point to point backhaul
Satellite uplink

## Mounting Options

Wall Mount
Client supplied Pole mount
Schedule 40 Aluminum Pole - 14 foot above ground
Steel Pole - 20-100 feet, any custom length
Triangular tower - 20 to 300 feet, 10 foot increments
Trailer with 25, 35, 45, 80 and 106 foot extendable mast

## Power Options

Grid power -110 or 220 VAC input with or without Battery backup
Grid power 110 or 220VAC, Low voltage power supply, up to 300 feet low voltage power wire to MOD-BOX with or without Battery backup
Generator/Battery, auto start/stop, 30-90 day run time between refueling
Solar/Battery, full stand alone

## Misc Options

Video Analytics - Intrusion Detection, Object Remove, Object Left behind, Wrong way travel, etc
Public Address Speaker
Microphone
Call button

## System Images



20 Foot tower open crate



20 foot tower closed crate for shipping



20 Foot tower with solar



12 Foot pole with solar



**20 Foot tower with solar**



**Ground Mount Solar system**



**20 Foot tower**



**Two MOD-BOX system with Grid tie UPS**

MOD-BOX systems are the most dynamic outdoor mounting systems available. Applications are limitless and reach well beyond what is shown in this document. Custom solution development is our specialty, call for more information.