



### Overview – TINDS

The ATRI TINDS is a family of Thermal Driver Viewer Enhancement (DVE) solutions used to increase safety, performance and situational awareness when operating vehicles during periods of limited visibility. Their primary application is for wheeled and tracked vehicles used for security, border and defense purposes. The TINDS comes in two configurations:

- Basic DVE – ATIC Series
- Standard DVE – ADSC-90 Series

The ADSC-90 Series of products is a Standard Configuration providing a Dual Spectrum Camera for front viewing and options for either low-light day camera, thermal imaging camera or dual spectrum camera for rear viewing.

### Primary Features:

- **Front viewing** Dual Spectrum Camera System to include:
  - Highly reliable 640 x 480 uncooled long-wave IR camera: 90° FOV
  - Low-light day camera with IR illuminator: 103° FOV
- **Rear viewing** option with either ADC low-light day camera, ATIC thermal imaging camera, or ADSC-90 dual spectrum camera
- Configurable for front, rear and side views for complete Situation Awareness if required
- Driver safety tools
  - Scale grid display
  - Distance indicator
  - Vehicle pitch / roll indicator
- IP67 rated camera housings purged with dry nitrogen
- Service life up to 55,000 hours
- NATO Support Agency NSN: 5855-47-000-9209
- Custom configurations and color options

## ADSC-90 Dual Spectrum Camera



## ATRI TINDS DVE Increases Survivability and Mobility



### ADSC-90 Thermal Imaging Camera Specifications

IR Detector	640 x 480, LWIR
Detector Type	Uncooled VOx Microbolometer
Pixel Pitch	17 micron
Frame Rate	60 Hz
Spectral Band	7.5 – 13.5 micron
Thermal Sensitivity	≤ 30mK
Focal Length	7.5 mm / F1.2
Field of View	90° (H) x 69° (V)
Video Output	NTSC / PAL
Video Color	Black-Hot / White-Hot / Green-Hot
Digital Zoom	Up to 8X

### ADSC-90 Low-Light Day Camera Specifications

Detector	1/2.8" Progressive Scan CMOS
Pixel Array	1937 (H) x 1097 (V); 2.12 Mega Pixels
Focal Length	2.5 mm / F2.6
Field of View	103° (H) x 68° (V)
Min Illumination	0.01 Lux @ F2.5 – 30 IRE 0.005 Lux @ with ICR on 0.0003 Lux with DSS on
IR Illumination	0 Lux with IR illuminator (built in)

### ADSC-90 Physical Specifications

Size (H x W x D)	81 x 168 x 169 (mm)
Weight	1.87 kg

### Environmental Specifications (designed to meet MIL-STD-810H)

High Temperature	Operating: 60°C; Storage: 71°C
Low Temperature	Operating: -40°C; Storage: -55°C
Rain	Rate: 1.7 mm/min (4 in/hr)
Humidity	95% Relative Humidity at 60°C
Salt / Fog	Method 509.5 (5% Salt, ± 1%)
Vibration	5-5000 Hz, 2.0 Grms
Functional Shock	10G, 11ms duration
IP Rating	IP67 (Dust Tight / Water 1m for 30 minutes)

### Other Specifications

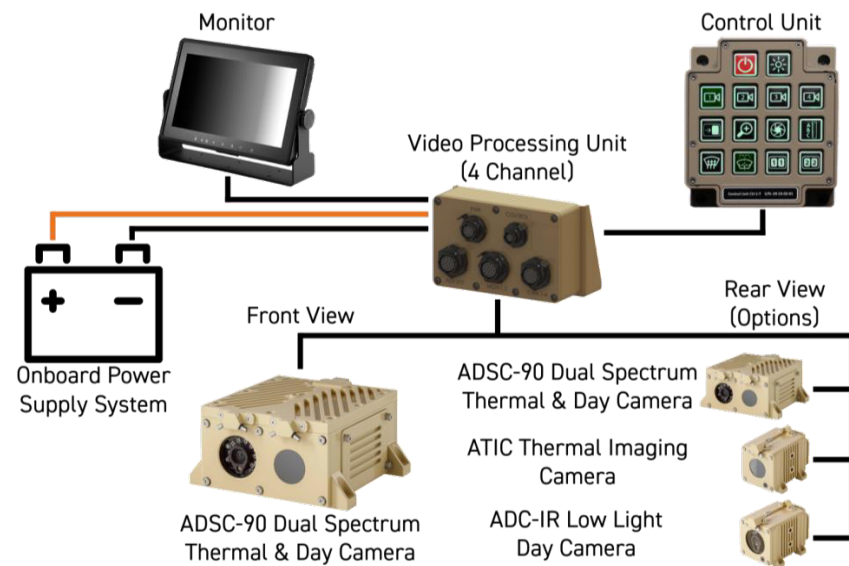
Power	10 – 36 VDC
Power Consumption	12W; 19W with heater

### Standard Accessories – Included

Rugged LCD Monitor	10.1 inch standard
Video Processing Unit	4 Channel Input
System Control Unit	
Shock Resistant Protective Case	Transport and Storage
Cables (contact for lengths)	Power Supply Camera Connection Monitor Connection

### Optional Accessories

Magnetic Mount	
Camera Cleaning System	



### Monitor Display Options

- Fullscreen
- Split screen
- Quad screen
- Picture-in-picture

### Control Unit Capabilities

- Preset Views (up to 4)
- Image Polarity: BH, WH, GH
- Digital Zoom: 2x, 4x, 8x
- Heating and Cleaning



Quad Display Mode

### Part Number

- TINDS-ADSC-90-X-V1
- TINDS-ADSC-90-X-V2
- TINDS-ADSC-90-X-V3
- TINDS-ADSC-90-X-V4

### Model

- TINDS ADSC DVE SYSTEM, 640X480, 103° FOV, X, V1
- TINDS ADSC DVE SYSTEM, 640X480, 103° FOV, X, V2
- TINDS ADSC DVE SYSTEM, 640X480, 103° FOV, X, V3
- TINDS ADSC DVE SYSTEM, 640X480, 103° FOV, X, V4

### Description

- Front: ADSC-90 Dual Spectrum Camera / Rear: No Camera
- Front: ADSC-90 Dual Spectrum Camera / Rear: ADC-IR Low Light Day Camera
- Front: ADSC-90 Dual Spectrum Camera / Rear: ATIC Thermal Imaging Camera
- Front: ADSC-90 Dual Spectrum Camera / Rear: ADSC-90 Dual Spectrum Camera