



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 primary configurations:

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

The ATIC Series of products is a Basic Configuration providing a thermal imaging camera for front viewing and options for either low-light day camera or a thermal imaging camera for rear viewing.

Primary Features:

- Highly reliable 640 x 480 uncooled long-wave IR camera
- Front viewing with Wide thermal driver viewing angle of 90°
- Rear viewing option with either thermal imaging camera or low-light day 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: 5855-47-000-9211
- Custom configurations and color options

ATIC Thermal Imaging Camera



ATRI TINDS DVE Increases Survivability and Mobility



ATIC 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
Size (H x W x D)	78 x 80 x 118 (mm)
Weight	0.63 kg
Video Output Format	CVBS, NTSC / PAL

ADC 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 (builtin)
Size (H x W x D)	78 x 80 x 118 (mm)
Weight	0.58 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

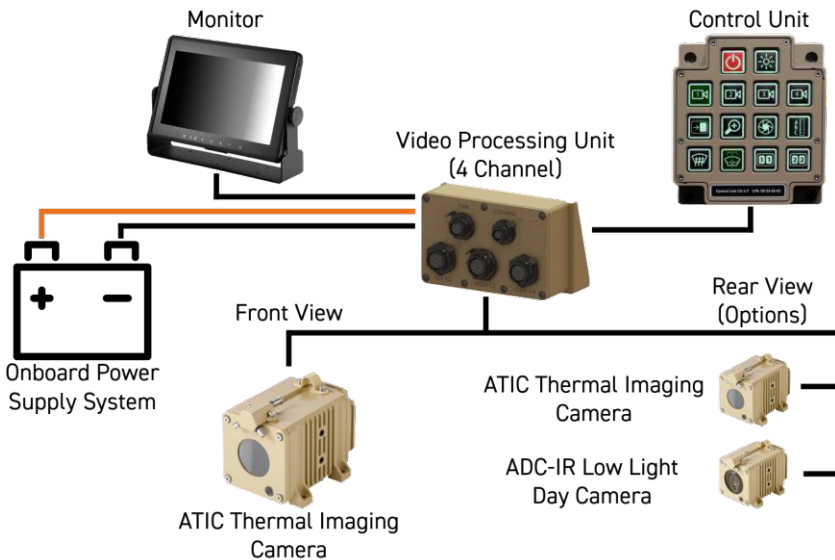
Power	10–36 VDC
Power Consumption	ATIC: 3W, 10W with heater ADC: 4W, 9W with IR LEDs, 16W with IR LEDs + heater

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



Picture-in-picture Display

Part Number	Description
TINDS-ATIC-640-X-V1	TINDS ATIC DVE System, 640x480, X (Color), Version 1
TINDS-ATIC-640-X-V2	TINDS ATIC DVE System, 640x480, X (Color), Version 2
TINDS-ATIC-640-X-V3	TINDS ATIC DVE System, 640x480, X (Color), Version 3

Information
Front: ATIC Thermal Imager / Rear: No camera
Front: ATIC Thermal Imager / Rear: ADC-IR Low Light Day Camera
Front: ATIC Thermal Imager / Rear: ATIC Thermal Imager