

argus[®]

thermal imaging from e2v

Argus[®] 4 LRT (Long Range Telemetry System)

Introduction

The Argus[®]4 LRT (Long Range Telemetry System) has been designed to allow rugged wireless transmissions of the thermal image from the camera for remote viewing outside the incident.



DTX1400 Features

- Digital modulation and compression techniques
- Superior performance in non-line of sight and highly multi-path applications
- Digital video picture quality, noise free regardless of distance
- Line of sight range up to 1km, depending on radio environment
- Frequency band: L-Band
- Output power 200mW e.i.r.p max
- Narrow bandwidth 2.5 MHz (1.25 MHz option available)
- MPEG2 compression for high quality image
- 32-bit AES encryption
- Optional AES128/256 bit encryption for secure applications (subject to license)
- NiMH battery technology gives approx. 75 minutes operation.

Warranty

The Argus[®]4 LRT Transmitter and Remote Receiver Station are supplied with a one-year warranty.

DRRS1400 Features

- Self-contained in a rugged, waterproof, hard carry case
- Integrated dual antennae and tuners providing two way diversity MRC which eliminate fade and multi-path
- High brightness 8.4" colour TFT display
- High capacity internal Lithium Ion Battery
- Battery status indicator
- Analogue video out for recording and external displays
- Comprehensive On Screen Display (OSD) diagnostics for link analysis, including spectrum analyzer
- Optional internal AES128/256 decryption (subject to licence)

Product Order Codes

- DTX1400 - Argus[®]4 LRT Transmitter
- DRRS1400 - Argus[®]4 LRT Remote Receiver Station
- ARGUSDRX - BC - AC - Charger
- ARGUSDRX - BC - DC - Charger

Technical Specification

Compliance

EMC	EN 301 489-28 V1.2.1 (2002-09)
Radio Type Approval	ETSI EN 300 440-2 (2008-05)
Safety	IEC 60950-1 and related national standards
RoHS	All parts of the system are RoHS compliant as per EU directive 2011/65/EC

Environmental

Transmitter

Operational Temperature range	45 minutes at 80°C (176°F) 15 minutes at 150°C (300°F) 5 minutes at 260°C (500°F)
Minimum Operating Temperature range	-10°C (140°F)
Sealing	IP67
Impact	The camera, when fitted to a transmitter, is designed to withstand a drop of 2 metres (78 inches). The transmitter may suffer damage when a direct impact is made on the transmitter
Vibration/Shock	EN 60721 - 3 - 2 Class 2M3 (transportation)
Storage Temp Range	-10°C to +40°C (14°F to 104°F)

Receiver

Operational Temperature range	-10°C to +50°C (14°F to 122°F)
Sealing	IP40
Vibration/Shock	EN 60721 - 3 - 2 Class 2M3 (transportation)
Storage Temperature Range	-10°C to +50°C (14°F to 122°F)

Performance

Operating Frequency	L-band 1.2 to 1.4 GHz
Range	Up to 1km (3280 ft) line of sight Performance in buildings is dependant upon construction
Output Power	200mW e.r.i.p max
Transmit mode	Bandwidth 2.5 MHz (1.25 MHz option) Modulation: QPSK FEC: 2 / 3
Tuning Steps	1 MHz
Video Encoding	NTSC via MPEG2

Mechanical

Transmitter

Overall Dimensions (H x W x D)	59 x 126 x 69mm (2.3 x 5.0 x 2.7 inch)
Antenna Height	150mm (6.0 inch)
Materials	Radel [®] R-5100
Weight	420g (1lb 1 oz)

Receiver

Display	8.4 inch Transflective Colour TFT
Receiver dimensions	275 x 175 x 70mm (10.8 x 6.8 x 2.8 inch)
Weight of Receiver	1.95kg (4.3 lbs)
Overall Dimensions (H x W x D)	170 x 420 x 320 (6.7 x 16.5 x 12.5 inch)
Overall Weight	5.5 kg (12 lbs)



Battery

Receiver

Type	Lithium Ion Rechargeable Battery
Capacity	5200 mAh
Battery Life	>3.5 hours at ambient temperature (22°C, 72°F)
Charge Time	2.5 hours nominal non operational
Charging Temperature	0°C to 40°C (32°F to 104°F)

Transmitter

Type	Ni-MH Rechargeable Battery
Capacity	2100 mAh
Battery Life	>75 minutes at ambient temperature (22°C, 72°F)
Charge Time	2 hours nominal using Argus [®] camera charger
Recharge Cycles	500 @ 80% capacity
Charging Temperature	0°C to 40°C (32°F to 104°F)