

SOL7 Drop Camera – SOL7DCAM

COFDM – Video, Audio Telemetry and IP Products

April 2016 Data Sheet



SOL7DCAM with Camera and Microphone attached

The SOL7DCAM is the fourth generation of Drop Camera from DTC. The SOL7DCAM Transmitter incorporates a COFDM digital video transmitter, battery, camera and microphone into a rapid deployment robust chassis. The integral camera can also be abstracted on a cable or used as a generic video input, giving this generation of DropCam a high degree of flexibility.

The SOL7DCAM is ideal for rapid deployment tactical scenarios where video coverage is required across ranges of typically 300-500m and line of sight is not available.

The SOL7DCAM is housed in a robust IP66 housing and is suitable for outdoor deployment. The integral battery pack provides up to 3 hours of power and can be recharged using the DC supply provided.

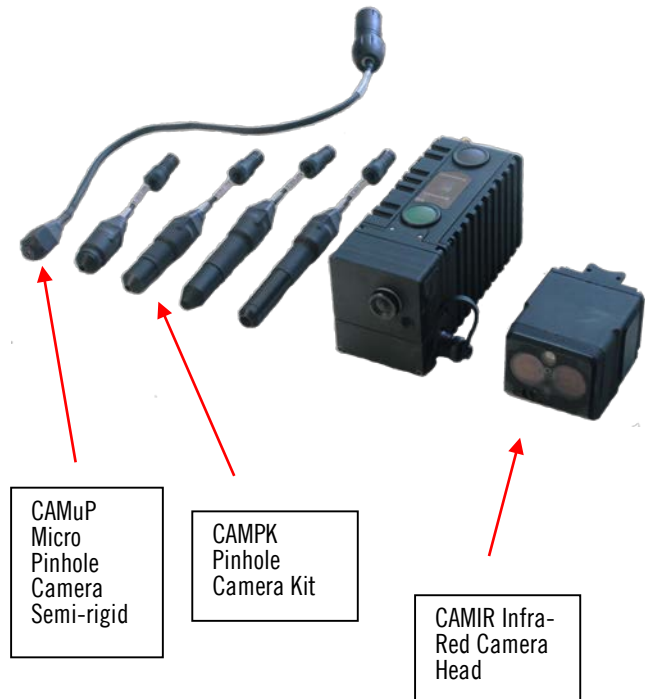
The SOL7DCAM is provided with an interface cable that provides a generic input interface for video, two audios and a data channel (can be used for sensor data or GPS typically). It is also supplied with a high resolution low light camera, with interchangeable lenses, which docks directly to the transmitter body, or can be abstracted using a 3m cable.

The SOL7DCAM is compatible with the full range of accessory cameras (see photo) including pinhole and IR, some of which can also dock directly, to make a self contained video. These camera head accessories make the drop camera an extremely versatile solution for all microwave video scenarios. PTZ cameras can also be connected. PTZ camera control is received wirelessly by the CAMTELTX telemetry, this format is described fully in the Tactical Camera System data sheet.

Cameras can also be abstracted from the transmitter body; using the 3m camera extension cable provided, which may provide more convenience in hide situations.

Security of the link is ensured through the use of optional AES128/256 encryption.

SOL7 Drop Camera Family of optional heads



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Specification:

Input	
Video and Audio	Binder female 12 pin Video, Audio, camera control, sensor, camera power
DC In and Control	Binder male 8 pin
Output	
RF Out	SMA Female
Antennae	
RF Out Antenna	2dBi Omni
RF	
Frequency	300 to 450MHz, 1.00 to 1.50GHz, 1.65 to 2.40GHz, 4.40-5.00GHz
Power	100mW
Tuning Step Size	250kHz
Modulation	
Bandwidth	COFDM 8, 7, 6MHz DVBT, 2.5MHz, optional 1.25MHz
FEC	Standard DVBT, 2.5MHz = 1/3 or 2/3
Video	
Input	PAL, or NTSC
Compression	H.264 MPEG 4
Resolution	720 to 352 pixel user configurable
Bitrate	4.8Mb/s to 600kb/s (full frame rate)
Audio	
Input	Microphone Level (line level with AV cable only)
Compression	Nicam or MPEG layer 1
Sample Rate	48 or 32kb/s (user selectable)
Bitrate	64 to 728kb/s (user selectable)
Camera	
Sensor	¼" CMOS Fixed Focal 3.4mm (56deg H-FOV) F2
Format	-P = PAL, -N = NTSC
Additional Lenses	9mm and 16mm
Resolution	>460 TVL
Sensitivity	0.05Lux
SNR	>46dB
Microphone	
Type	Omni 50 – 13kHz
Sensitivity	60dB +/-3dB
Encryption	
Type	AES128, or AES256 (Optional)
Control	
Remote	RS232 control from PC application
Local	Config switch, ON/OFF,
Physical	
Size	L 112mm, W 45mm H 54mm
Weight	500g
Mounting	Magnetic strip, tripod and screw fixing

Power

Voltage	9-16V
Consumed	5.5W
Battery (approx.)	2 hours 45 minutes to 3 hours operating

Environment

Temperature	-20 to +60 deg C
Sealing	IP66

Product Codes

SOL7DCAM-P-030045	SOL7DCAM-N-030045
SOL7DCAM-P-100150	SOL7DCAM-N-100150
SOL7DCAM-P-165240	SOL7DCAM-N-165240
SOL7DCAM-P-198270	SOL7DCAM-N-198270
SOL7DCAM-P-440500	SOL7DCAM-N-440500

Kit Contents

- Pelicase, lid instructions and CD
- Drop Camera Body
- Replacement 9 and 16mm Lens
- Mounting Camera 3.6mm Lens
- Antenna
- AC mains adaptor
- Control break out cable
- Video and audio in cable
- 3m Camera Interface Cable
- 3m DC Input Cable
- Magnetic Bracket
- 3" Mounting Spike

Accessory Options

CAMIR-X	Infra-Red Camera Head (5m Illumination at 940nm Infra Red)
CAMP15-X	Pinhole Camera with 15mm Lens
CAMP30-X	Pinhole Camera with 30mm Lens
CAMP45-X	Pinhole Camera with 45mm Lens
CAMP70-X	Pinhole Camera with 70mm Lens
CAMPK-X	Pinhole Camera Kit, 15, 30, 45, 70mm Lens
CAMuP-X	Micro Pinhole Camera Semi-rigid
CAMuSZPT-X	Micro Switched Zoom Pan and Tilt Camera

X = P for PAL, X = N for NTSC

CAMTELRX-090	– Telemetry receiver 902MHz
CAMTELRX-086	– Telemetry receiver 868MHz
CAMTELRX-043	– Telemetry receiver 433MHz

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