

# DTC

## Domo Broadcast Catalogue

Broadcast without boundaries



Domo Broadcast



## There's broadcast, and then there's DTC Domo Broadcast.

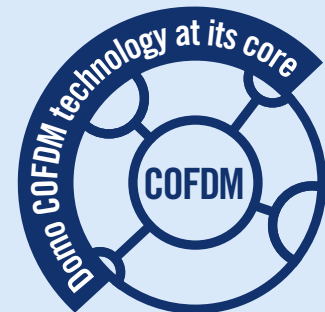
At the forefront of wireless broadcast technologies, DTC develops cutting-edge and innovative solutions, while providing real technical and operational benefits to newsgathering, live production, and other high profile applications in solutions that empower users to broadcast without boundaries.

### Leading the revolution in POV technology

As a world-class, global supplier of wireless links, we offer High Definition video using H.264 encoding, DVB-T Ultra low delay and IP based broadcast transmit and receive solutions. These have been designed specifically for electronic newsgathering, outside broadcast, satellite newsgathering, live motor and sports coverage, portable field monitoring and video assist applications.

### Unrivalled experience

DTC Broadcast Solutions come complete with Domo technology at its core and is backed by over 35 years' reliable experience of transmitting and receiving in live broadcast environments.



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# The Broadcast product family at a glance

## Video Transmitter Family



	SOLO7 – NANO SD	SOLO7 – NANO HD	Broadcast Nano	SOLO7 – OBTX	
Applications	UAV	•	•		
	Bodyworn sports (POV)	•	•		
	Electronic News Gathering				•
	Motorsport (POV)		•	•	
	Airborne applications		•	•	
	On-board applications (i.e. cycling)	•	•	•	
	Covert/Hidden camera	•	•	•	
	Broadcast (general)		•	•	•
Features	Built-in control panel			•	•
	Robust mobile performance	•	•	•	•
	Built-in touch screen				
	Lower power consumption	•	•	•	•
	Multiple RF frequencies	•	•	•	•
	Ultra small size	•	•	•	
	Inbuilt monitor				
	Suitable for integration (OEM)	•	•	•	
Ultra low delay	•	•	•	•	
Standard specification	Encoder	•	•	•	•
	Decoder				
	IP streaming				
	Backward compatible (MPEG2)				
	Stereo audio	•	•	•	
	Professional audio			•	•
	Power consumption	3-4.5W	4.5-10W	4.5-10W	7-13W
	Diversity				
	H.264	•	•	•	•
	SD	•	•	•	•
	HD		•	•	•
	4:2:2		•	•	•
	ASI input/output		• IN	• IN	•
	HDMI		• IN 1080P30	• IN 1080P60	• IN 1080P60
	HD-SDI		• IN	• IN	• IN
	3G-SDI		• IN	• IN	• IN
	Mesh				
	MIMO				
	Standard DVBT	•	•	•	•
	Narrowband modulations	•	•	•	•
UMVL	•	•	•	•	
Options	IFB intercom				
	Amplifier option	•	•	•	•
	Field controller	•	•		•
	Down converters				
	Standard antenna	•	•	•	•
	Bodyworn antenna	•	•	•	
	Aircraft antenna	•	•	•	
	Encryption	•	•	•	•
Camera control				•	

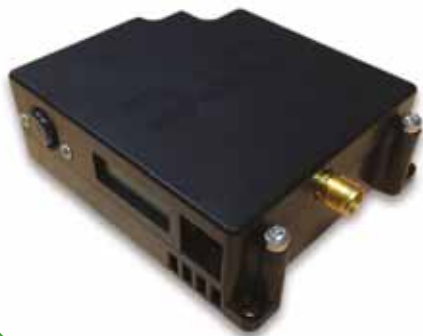
**Video Receiver Family** **Broadcast IP Mesh Family**



SOL07 HD	PRORXD-1RU	PRORXD-2RU	NANOVUE HD	MESH RADIO PHASE 5	SOL08 – SDR	Encipher
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2	4	8	2	2x4 or 1x4	2x2 or 1x2	
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## HD/SD Transmitters

### Broadcast Nano



NEW

#### Features:

- Ultra-low latency high profile H.264 SD and HD encoding
- Video formats up to 1080p60 with optional 4:2:2 Chroma sampling
- Balanced stereo audio input with switchable phantom power
- Industry standard DVB-T modulation for interoperability with existing systems
- Domo Broadcast UMVL modulation for enhanced frequency, high speed performance
- Controlled via USB or Bluetooth
- Integrated sunlight-readable OLED display
- Very low power consumption, typically 7.5W
- On-board camera and video assist applications
- Weight: 135g

#### Benefits:

A lighter, compact nano transmitter, evolved from the original Nano, incorporates a control panel, robust broadcast standard connectors and forced cooling, providing much improved thermal performance. Production teams can offer viewers stunning high definition images with ultra-low latency from the heart of the action, in situations not previously possible due to equipment size and battery run-time constraints.

The small size and ultra-low power consumption makes the Broadcast Nano ideal for a range of uses from Point of View and body worn applications such as live sports, live events, on-board motor sport applications and UAV drone installations, enabling true long range HD broadcasting. Optional lightweight, low power consumption amplifiers are also available for even greater range capability.

### SOLO7 – OBTX Transmitter



06

#### Features:

- 3G video formats up to 1080p 60
- 4:2:2 compression option
- Integrated camera control option
- Swappable RF modules
- H.264 low delay encoding
- Industry standard DVB-T modulation for high quality and interoperability with existing systems
- Ultra low power consumption for extended field performance
- Sports & Events coverage
- Newsgathering
- Wireless studio camera

#### Benefits:

A compact and feature-rich COFDM digital video transmitter, specifically designed for high quality wireless link applications. With proven Domo COFDM and H.264 encoder technology at its core enabling High Definition images, the small size and ultra low power consumption give maximum operational performance. Designed to offer maximum flexibility, the unit has a variety of video input options including composite, 3G-SDI and HDMI plus true balanced audio.

The transmitter has an integrated control panel with sunlight-readable OLED display covering all major functions and has 16 user-defined presets. A wide range of swappable frequency bands are available from 200MHz to 8.9GHz. Integrated UHF band Camera Control is available as an option.

### SOLO7 – Nano HD Transmitter



#### Features:

- Ultra-low latency high profile H.264 SD and HD encoding
- Standard DVB-T or Domo Broadcast UMVL modulation for enhanced high frequency/high speed performance
- Very low power consumption, typically 6W
- Video format up to 1080p 60
- Optional 4:2:2 Chroma sampling
- Exceptionally small size: 58mm x 36mm x 16.5mm
- POV Sports and events cameras
- Drone video links
- Extreme Sports
- On board camera links
- Video Assist
- Weight: 135g

#### Benefits:

The Nano HD Transmitter enables production teams to offer viewers stunning high definition images from the heart of the action, in situations never previously possible due to equipment size and battery run-time constraints.

The small size and ultra-low power consumption make the Nano HD TX ideal for a range of applications from Point of View links to UAV drone installations, enabling true long range HD broadcasting from these increasingly popular devices for the first time. Optional lightweight, low power consumption amplifiers are also available for even greater range capability.

# HD/SD Transmitters

## SOL07 – Nano SD Transmitter



### Features:

- Ultra-low latency H.264 SD encoding
- Supports standard DVB-T modulation and Domo Broadcast Narrowband (2.5 MHz), Ultra Narrowband (1.25 MHz) and Ultra-X (625 kHz) bandwidths
- Controlled via USB or RS232, can be configured by Domo Broadcast Field Controller
- Exceptionally low power consumption, typically 3.7W
- Exceptionally small size: 67mm x 68mm x 22mm
- POV Sports and events cameras
- Drone video links
- Extreme Sports
- On board camera links
- Weight: 51g

### Benefits:

An ultra-miniature COFDM digital video transmitter designed specifically for when size & power consumption are critical such as body-worn applications. Offering several user-selectable modes that trade off image quality against range, the SOL07 Nano Transmitter is ideal for battery powered applications requiring long term deployment, small unmanned aerial vehicles and body worn use.

## HD/SD Receivers

### SOL07 – HD Receiver



#### Features:

- Small size: 145 x 95 x 40 mm (excluding cables)
- Built in down converters (band specific)
- H.264, MPEG-4 ASP and MPEG-2 decoding
- Low power
- Fully featured 8/7/6/2.5/1.25/0.625 MHz demodulation
- Maximal Ratio Combining Diversity
- IP video streaming (RTSP and UDP)
- Internal recording to 32GB SD card (SD Narrowband only)
- Ethernet control
- Front Panel control
- USB control
- AES128/AES256 decryption (optional)

#### Benefits:

The SOL7HDRX is a compact digital diversity receiver that comes in a durable and lightweight housing. This product can be used both remotely and in fixed location applications. The SOL7HDRX can be made with 'band specific' built in down converters. Control of the SOL7HDRX is achieved via the FCON, RS232, USB or Ethernet. The product is supplied with external mains to DC supply, for fixed location use.

It can also run from an external rechargeable battery pack for remote applications. These battery packs allow for rapid interchange, and provide approximately >5 hours continuous use battery life.

An on-board Micro SD card enables local recording of SD Narrowband video possible. Playback and downloading of recorded video is achieved via the Ethernet interface.

### PRORXD-1RU Broadcast Receiver Decoder



#### Features:

- 2 or 4 way COFDM diversity – maximal ratio combining across all RF inputs for maximum sensitivity and flexibility
- Dual SD/HD MPEG2 and MPEG4 4:2:2 decoding capability – option to decode 2 HD signals simultaneously with optional HD-SD down conversion
- Composite SD/HD-SDI, HDMI outputs plus ASI in/out
- IP streaming in/out
- B&B and Tri-Level Gen-lock supported
- News gathering/SNG vehicles
- Sports & Extreme sports coverage
- Events coverage
- Video Assist

#### Benefits:

The excellent RF performance is complemented by an extremely flexible decoding platform, with low-delay SD and HD MPEG2 and H.264 decoding ensuring compatibility with all Domo Broadcast and most 3rd party encoders. An optional 2nd decoder can be enabled, allowing 2x SD or HD signals to be decoded. Multiple output formats are offered with composite and SDI outputs in SD and HD-SDI including embedded audio. ASI transport stream in/out is available and HDMI outputs are provided for use with domestic TVs.

A comprehensive On Screen Graphical display is available for monitoring and diagnostics, which can be enabled or disabled separately on the two video outputs.

### PRORXD-2RU Broadcast Receiver Decoder



#### Features:

- 2,4,6 or 8 way COFDM diversity – maximal ratio combining across all RF inputs for maximum sensitivity and flexibility
- Dual SD/HD MPEG2 and MPEG4 4:2:2 decoding capability – option to decode 2 HD signals simultaneously with optional HD-SD down conversion
- Composite SD/HD-SDI, HDMI outputs plus ASI in/out
- IP streaming in/out
- B&B and Tri-Level Gen-lock supported
- News gathering/OB vehicles
- Central Receive systems
- On board coverage
- Multi area events coverage

#### Benefits:

The excellent RF performance is complemented by an extremely flexible decoding platform, with low-delay SD and HD MPEG2 and H.264 decoding ensuring compatibility with all Domo Broadcast and most 3rd party encoders. An optional 2nd decoder can be enabled, allowing 2x SD or HD signals to be decoded. Multiple output formats are offered with composite and SDI outputs in SD and HD-SDI including embedded audio. ASI transport stream in/out is available and HDMI outputs are provided for use with domestic TVs.

A comprehensive On Screen Graphical display is available for monitoring and diagnostics, which can be enabled or disabled separately on the two video outputs.



## SOL07 – NanoVue HD Receiver



### Features:

- Most compact HD receiver/monitor available
- Easy to use touch screen display
- HD-SDI output
- SD/HD MPEG2 and H.264 decoding
- Return vision Steady cam rig
- Video Assist, Film and event coverage
- Built in down converters

### Benefits:

A fully portable digital diversity receiver ideal for Film and Video Assist or Steadicam reverse vision applications. Incorporates a high resolution, daylight viewable touch screen display with a fully compliant DVB-T 2-input COFDM receiver and SD/HD MPEG2/H.264 decoder. Includes HD-SDI out and IP streaming in/out. Clip on batteries provide approximately 4 hours run time.

# Broadcast IP Solutions

## Encipher



NEW

### Features:

- Dual high profile HD H.264 video encoders with total encoder throughput of up to 1080p30 (1080i60)
- Up to two simultaneous IP streams – RTSP, UDP, unicast and multicast
- Two HD-SDI, two composite and single HDMI video inputs
- Configurable On Screen Display (OSD) with timestamp
- ABS encryption as standard
- Built in video analytics
- Sub 200 kbps IP streaming suitable for external 3G, 4G, LTE modems
- Micro SD card for store and forward functionality or upgrade
- Up to 16 configurations can be stored
- SDI power injection for compatible cameras
- Power over Ethernet
- Adaptive bitrate
- ONVIF profile S support

### Benefits:

Our new professional dual channel HD IP encoder is a feature-rich device, ideal for live video streaming and surveillance applications. The unit combines broadcast quality H.264 dual-HD video encoders, composite video, low delay, Power over Ethernet and camera control all in a highly compact form factor.

ENCIPHER offers software selectable audio source, embedded or analogue audio, for each encoder channel.

The encoder can operate in a variety of transmission bandwidths, from 100kbps to 30Mbps, allowing the user to configure the system according to the application requirements.

## SOLO8 – Software Defined Radio



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### Features:

- Proven DOMO H.264 encoder technology at its core
- COFDM; DVB-T and narrow band
- IP Mesh node for streaming directly from the camera
- Exceptionally small size and ultra-low power consumption
- SDI or Ethernet inputs
- VoIP return channel
- PTZ camera control
- Supports dual HD-SDI inputs
- IP Wireless News gathering
- HD COFDM links

### Benefits:

Three enclosure variants are available including:

**Robust** – a passively cooled IP66 rated enclosure ideal for outdoor or body-worn.

**Concealment** – an ultra-miniature package for integration into concealment solutions.

**Plain** – a compact higher power solution for increased range.

The transmitter integrates an ISM band telemetry modem, supporting 433MHz or 915MHz. This allows return command control information to be sent to the SOLO8SDR unit.

Software Defined Radio App available options are a COFDM Transmitter (SDRAPP-TX), an IP Encoder (SDRAPPENC) and IP MIMO Mesh (SDRAPP-MESH).

## NETNode IP Mesh Phase 5 – Robust



### Features:

- Self-forming, self-healing mesh architecture makes it ideal for use for wide area coverage & multi-hop, mobile application
- Robotic systems
- >25Mb/s of IP data is possible
- Mission Commander compatible
- Entire mesh can operate in a selectable bandwidth of between 2.5MHz and 10MHz
- IP back haul/central receive systems
- Wide area mesh infrastructure node

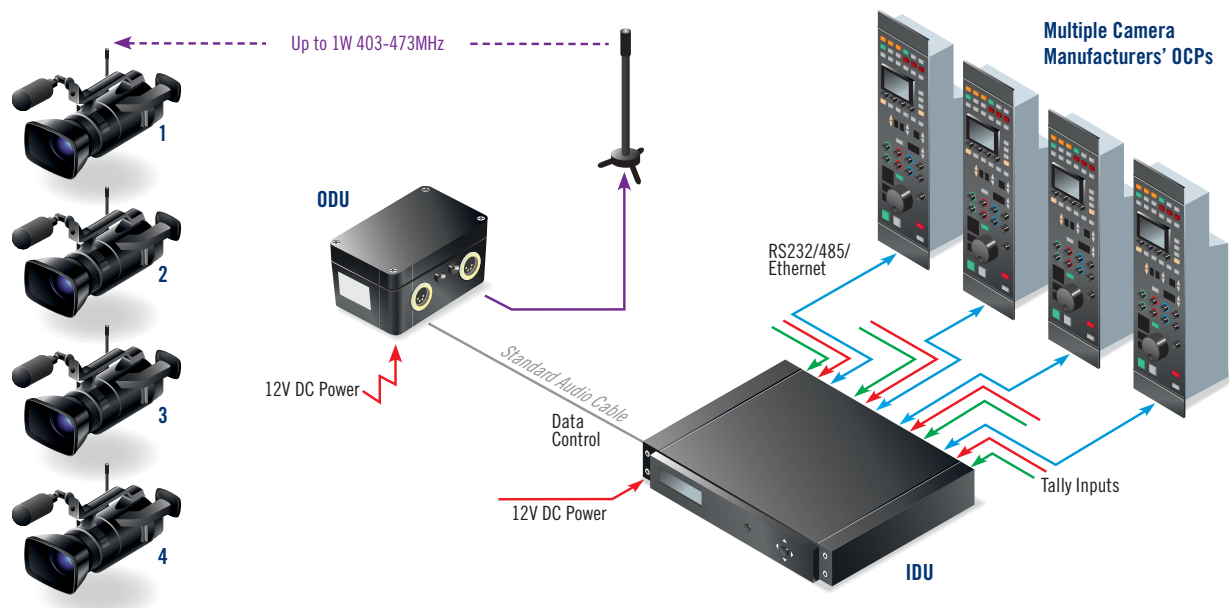
### Benefits:

The latest breakthrough in mesh technology from DTC offers MIMO options that almost double the IP throughput and provides twice as much output power, increasing range.

Control of the deployed mesh is achieved using the in-built web browser or comprehensive Mission Commander PC application. This software is used to configure and monitor the mesh and wider DTC broadcast systems..

# Broadcast Camera Control Solutions

## Broadcast Camera Control System



### Features:

- Control of all major camera functions via standard camera manufacturers' OCP
- Control of up to 4 cameras via single UHF channel
- External green and red tally outputs (open collector)
- Separate indoor (IDU) and outdoor (ODU) units for flexible TX antenna location via standard twisted-pair audio cable
- Wide frequency range 403-474MHz via IDU front panel (other bands available on request)
- Phantom Power option for easy rigging of the ODU
- Optional integrated camera control receiver in Solo 7 OBTX transmitter
- Sports and OB coverage
- Wireless studio cameras

### Benefits:

Next generation features in a rugged, easy to use 'plug and play' system architecture. Designed in close consultation with experienced operators, many of the undesirable features present on 'first generation' systems have been overcome.

The system interfaces with camera manufacturers' standard control panels (OCPs), giving the operator complete familiarity with standard cabled systems and eliminating the need to rig separate OCPs when RF cameras are required.

## Accessories and Amplifiers

### SOLO – 1W Nano Amplifier



actual size

#### Features:

- Very low power consumption, typically 3W at 0.5W TX Power
- SMA or N-Type male and female RF in/out connectors
- Control and power interfaces use a Lemo 00 connector
- Exceptionally small size: 44mm x 31mm x 18mm
- Sports and event coverage
- Longer range News gathering applications
- On board and Drone links
- Weight: 65g

#### Benefits:

Ultra-miniature COFDM Power Amplifier, designed for point of view applications in live broadcasting environments requiring long term battery power.

### SOLAMP 500mW Amplifier



#### Features:

- Available for frequency ranges - 300 to 450MHz, 1.00 to 1.50GHz, 1.50 to 2.00GHz, 2.00 to 2.50GHz, 3.00 to 3.50GHz and 4.40-5.00GHz
- Convenient small size
- Weight: 150g
- Companion product for the SOLMTX

#### Benefits:

A 500mW power amplifier designed specifically to partner the Domo Broadcast SOLMTX transmitter. The ideal power amplifier for applications where space is at a premium and when additional range may be required.

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### NETNodeAMP Mini Robust 1W/2W Amplifier



#### Features:

- Bolt-on amplifier, increasing power output of NETNode Mini Robust from 100mW up to 2W
- Gives a rugged non line-of-sight link of around 1km
- Line-of-sight operation to several kilometres
- Large variety of frequency bands
- Wider area mesh coverage

#### Benefits:

The NETNodeAMP is a bolt-on amplifier from Domo Broadcast, is available depending on frequency as a 1W or 2W unit, which connects directly to a NETNode Mini Robust node, thereby increasing the power output from 100mW up to 2W (33dB) for greater range requirements.

The NETNodeAMP combined with the NETNode Mini Robust, provides a rugged non line-of-sight (NLOS) link of around 1km with non-directional antennas, and gives a line-of-sight (LOS) operation to several kilometres, whilst the sealed IP-66 aluminium enclosure allows the unit to be deployed in external environments for prolonged periods of time.

# Accessories and Amplifiers

## FCON – Field Controller

### Features:

- In line standalone controller
- Or USB to RS232 converter
- Remote client for CryptoWizard

### Benefits:

A discrete and comprehensive portable device, the Field Controller removes the need to take a PC into the field.

It acts as a secure carriage mechanism for field management of encryption data. The Field Controller can also act as a remote agent for the Domo Broadcast CryptoWizard application when pre-loaded with encryption keys.



# Fibre Extenders and Down Converters

## Broadcast Down Converters



### Features:

- Supplied in selectable high/low gain or fixed high and low gain variants
- Excellent low noise performance
- Designed for permanent outdoor deployment
- Variety of mounting kits available
- 150–850MHz output frequency
- Required on all receive applications

### Benefits:

The Domo Broadcast standard barrel down converter is designed for permanent outdoor installations on the base of the receive antenna. Down converters can successfully drive >70M of RG59 or >130M of RG6 cable with down converted UHF signal with no loss of performance.

### Frequencies:

1000 – 1500MHz  
 1600 – 2025MHz  
 2025 – 2555MHz  
 1980 – 2700MHz  
 3100 – 3600MHz  
 4400 – 5000MHz  
 5500 – 6000MHz  
 6400 – 7000MHz  
 7000 – 7500MHz  
 8100 – 8600MHz  
 8400 – 8900MHz  
 1750 – 2380MHz

## SOLO Fibre – Fibre Antenna Extender System



### Features:

- 'One cable solution' for radio camera receive and data control
- Location of antenna and down converter can be extended
- TAC or SMPTE cable formats
- Fibre connectors can be customised
- Splash proof head units
- Rack mountable base units
- Return camera control data line
- Wide area sports coverage
- Multi area events coverage
- Central receive systems

### Benefits:

Domo Broadcast offers antenna fibre extension solutions, which allow prime location of receive units in outside broadcast areas for maximum monitoring flexibility.



This catalogue on Domo's innovative Broadcast technology is part of a series of documents of our core products: Video, IP Mesh, Cellular, RDF, Tagging, Tracking & Locating and Audio solutions.



## Taking broadcast to the next level

DTC's POV camera solutions produce live, in the heart of the action, footage; working across multiple platforms including live sports broadcasting. With Domo Broadcast SOLO7 Nano HD TX technology, broadcasters and production teams can achieve stunning high definition images in situations never previously possible due to equipment size and battery run time constraints.

## Get in touch:

For further information on Domo Broadcast products or solutions, please contact your Sales Account Manager or email, [solent.broadcast@domotactical.com](mailto:solent.broadcast@domotactical.com)

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