

# COFDM - VIDEO, AUDIO TELEMETRY & IP PRODUCTS

## SOLO - DIGITAL WIRELESS VIDEO SYSTEM

### SOLO4 - RECEIVER

The Receiver is a feature-rich diversity input digital video receiver, equipped with two antenna inputs with external down-converters to allow antenna placement remote from the receiver housing. The Receiver operates a maximum ratio combining digital diversity, ensuring video is recovered free from distortions typically associated with fading and multipath. The Receiver is compatible with multiple COFDM transmission formats from 8MHz DVB-T to the unique 2.5 and 1.25MHz narrow band modes proprietary to domo. Incorporating MPEG2 and MPEG4 video decoding, the Receiver is suitable for all mission types.

The narrow bandwidth modulation offers unprecedented spectral efficiency, while also increasing the system sensitivity and, therefore, range. The Receiver has comprehensive on screen display diagnostic capability to show link quality and spectrum, enabling users to optimise transmission performance.

The optional Network Engine IP board provides the Receiver with a video streaming capability for network interfacing.

The domo SOLO4 Receiver is equipped with video, two voice and data channels, and is designed for easy integration into command vehicle, briefcase or central receive applications.

Security of transmission is ensured by the use of ABS encryption as standard or, for greater security, optional AES128/256 bit encryption algorithms, subject to export controls.

#### Features:

- Fully featured 8/7/6/2.5MHz (1.25MHz optional)
- Maximum ratio combining antenna diversity for fade and multipath elimination
- Comprehensive on screen display (OSD) diagnostics for link analysis, including spectrum analyser
- External down-converters for convenient antenna placement
- Internal AES128/256bit encryption (option)
- Optional IP interface board for IP streaming and network connection
- Very low delay video operation for real time applications
- Optional 4-way diversity.



#### Specification:

##### Down-converters

RF In	TNC
UHF Out	TNC

##### Input

UHF Input 1	TNC
UHF Input 2	TNC
Power	4 Pin 0B Lemo

##### Output

Composite Video	BNC
Stereo Line Level Audio	Lemo
Chaining Interface	Lemo
RS232 Data	Lemo
RS232 Control	Lemo

##### RF

Frequency Bands	2280 to 2550MHz, 1100 to 1400MHz, 50 to 850MHz (others on request) 250KHz
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##### Tuning Steps

##### Modulation

DVB-T bandwidth	8/7/6MHz
DVB-T Guard	1/32, 1/16, 1/8, 1/4
DVB-T FEC	1/2, 2/3, 3/4, 5/6
DVB-T Modulation	QPSK, 16QAM, 64QAM
SOLO Bandwidth	2.5MHz (1.25MHz optional)
SOLO Guard	1/16 1/8
SOLO FEC	1/3 2/3
SOLO Modulation	QPSK, 16QAM
Sensitivity	-95 to -105dB

##### Video

Line Standard	PAL/NTSC
Resolution	704, 528, 480, 352
Coding Mode	MPEG2 (MPEG4 optional)
Delay	43ms to 120ms depending on mode
Frame Rate	Full/Half/Quarter/Eighth (selectable)

##### Audio

Output	Line Level
Sample Rate	32KHz, 16KHz, 8KHz
Bits per Sample	12 or 8 bit

##### Data Interface

RS232 Data Output	1K2 to 115K2 baud switchable
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##### Encryption

Format	ABS (standard) AES128/256 (optional)
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##### Control

Remote Control	RS232 Control from PC GUI Application
Local Control	Front Panel 8 channel select, RF on/off, Range mode, Lock, Alarm
On Screen Display	Spectrum, RX SNR, RX Power

##### Physical

Dimension Base Unit	L 175mm, W 200mm, H 66mm
Down-converter	L 102mm, W 100mm, H 35mm
Weight Base Unit	2.2kg
Down-converter	300g

##### Power

DC input	9 to 16V Reverse Polarity Protected
Power Consumption	12W depending on mode

##### Environment

Temperature Range	-10 to +50 deg C
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Products are available to security users only, in licensed frequency bands. These products are not approved for use by unlicensed users. Commercial products are available to unlicensed users – please contact us for details.

**Product Code:** SOL4RX (2.5MHz TO MPEG4 1.25MHz UPGRADE ADD SOL4RXUP)

**ADLERTECH SYSTEMS PTE LTD**

56A KALLANG PUDDING ROAD #07-00. SINGAPORE 349329

Tel: (65) 6747 4636 Fax: (65) 6747 6919

EMAIL: sales@adlertechsystems.com