

# SOL7HDIFRX

## SOLO7 HD IF Receiver

### Overview:

The SOL7HDIFRX is a digital four-way diversity video receiver and IP video streaming decoder with a rich feature set making it suitable for a wide range of applications.

Designed to operate with DTC downconverters, the SOL7HDIFRX provides four-way diversity IF inputs to improve the quality and reliability of the RF link. It can demodulate DVB-T or the unique DTC narrowband formats, allowing for a wide selection of demodulation bandwidths.

Equipped with low delay, broadcast quality video decoders, the SOL7HDIFRX supports HD-SDI, ASI, HDMI and Composite video outputs. A stereo pair of audio can be decoded and is output on headphone and line level outputs as well as embedded into the SDI and HDMI video outputs.



### Features and Benefits:

- Fully featured 8MHz/7MHz/6MHz/2.5MHz/1.25MHz/625kHz demodulation
- Four-way diversity maximum-ratio combining for fade and multipath elimination
- IP interface for streaming and network control connection
- Very low delay video operation for real time applications
- Low power - typically 10W IP decoding
- USB Type A for Wi-Fi/4G dongles
- HD-SDI and ASI output
- HDMI output to 1080p30
- Composite video output
- Headphone and line level audio outputs
- AES 128/256 bit encryption (option), ABS as standard

### Product Information:

#### Product Includes

CA4028	12V 5A 60W desktop power supply with locking power jack
SA4597	USB support stick

#### Accessory Options (sold separately)

Antennas	Various frequency bands available
BNCBNC5/10	BNC/BNC 75Ω ultra flexible cable. 5 or 10m lengths
CABRF1/3/10	TNC/TNC 50Ω RF cable. 1, 3 or 10m lengths
DCBGS	Downconverter barrel, gain switchable various frequency bands available

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### Technical Specification:

#### IO

Power	5.5mm jack (centre positive)
IF input	TNC x 4
HD-SDI out	BNC
ASI video out	BNC
Composite video out	BNC
HDMI video out	HDMI type A
Audio headphone out	3.5mm TRS
Audio line level out	3.5mm TRS
Ethernet	RJ45 Magjack
USB host port	USB 2.0 type A

#### RF Input

50MHz to 850MHz	Software selectable in bands
1GHz to 8.9GHz	Software selectable in bands with matched downconverter

#### DVB-T Demodulation

Bandwidths	8MHz, 7MHz, 6MHz
Modulation	QPSK, 16QAM, 64QAM
Guard interval	1/32, 1/16, 1/8, 1/4
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Sensitivity	-95dBm plus

#### Narrowband/UMVL Demodulation

NB bandwidths	2.5MHz, 1.25MHz, 625MHz
UMVL bandwidths	8MHz, 7MHz, 6MHz
Modulation	BPSK, 8PSK, QPSK, 16QAM
Guard interval	1/16, 1/8
FEC	1/3, 2/3
Sensitivity	2.5MHz, 16QAM, FEC 2/3: -95dBm 2.5MHz, QPSK, FEC 2/3: -99dBm 2.5MHz, QPSK, FEC 1/3: -102dBm

#### Video Format

*Composite video	PAL/NTSC
HD-SDI video	720p 50/59/60 1080i 50/59/60 1080p 23/24/25/29/30 1080psf 23/24/25/29/30
Coding mode	H.264 SD or HD
Delay	<43ms over RF link, depending on mode
Frame rate	Full/half/quarter/eighth

\* SD modes only

#### Audio

Line level	0.707V rms
Headphone level	30mW into 16Ω
Sampling rate	Up to 48kHz
Codecs	MPEG audio layer 1 or 2 NICAM LPCM

#### Data

RS-232	Via USB to serial adaptor
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#### Ethernet

Bitrate	10/100 Base-T
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#### Power

DC input	8-18V reverse polarity protected
Power consumption	10W IP decoding 36W including downconverters

#### Encryption

Standard	ABS 32-bit key
Licensed	AES 128/256 (subject to export control)

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### Technical Specification (cont.):

#### Physical

Dimension	180mm x 105mm x 42mm (excl. connectors)
Weight	940g approx.

#### Environment

Operating temperature	-10°C to +50°C with cooling
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#### Software License Code

Silver (included)	DVB-T, H.264 SD Only
Gold	Silver plus Narrowband 2.5MHz/1.25MHz, UMVL, H.264 HD, IP Decoding, Streaming, Dual Pedestal
Platinum	Gold plus Ultra-Extreme Narrowband 625kHz
AES128RX	AES 128-Bit Decryption
AES256RX	AES 256-Bit and 128-Bit Decryption

Export of encrypted products is subject to regulatory export controls.

For further information contact your Sales Account Manager, one of our Regional Sales Offices, or email [solent.info@domotactical.com](mailto:solent.info@domotactical.com)

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