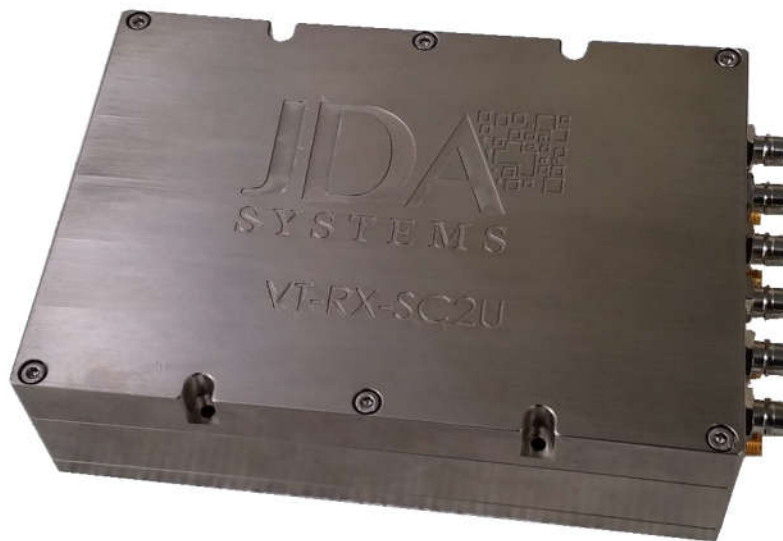


## VT-RX-SC2U All Band Receiver

The VT-RX-SC2U compact fully digital direct conversion all band (70MHz to 6GHz) receiver combines all the functions required for state of the art telemetry data reception, and optionally transmission, into a single easier to use and reliable system.



### VT-RX-SC2U All Band Receiver

The VT-RX-SC2U ultra performance all band receiver system offers a no compromise, high density data reception (and optionally transmission) solution, with integrated dual channel all band (70MHz to 6GHz) receivers, post detect combiner, integrated digital bit syncs, optional frequency analyzer and even optional dual channel transmitters. All this in a small form factor, low heat dissipation and ruggedized package.

The VT-RX-SC2U can operate stand alone or tethered. Remote control and monitoring is supplied as standard which allows the supplied Windows compatible control software be used locally or remotely for single or multiple units. This easy to use full function graphical software interface controls and monitors all aspects of the VT-RX-SC2U receiver systems operation.

The VT-RX-SC2U receiver system has a very wide bandwidth of more than 30 MHz per channel over the range 70MHz to 6GHz and an ultra low total noise figure of better than 4db.

This fully digital direct conversion receiver provides dual channel trellis based bit synchronization functionality for TIER0 and TIER1 and optional TIER2 reception with improved data reception performance over traditional reception systems of anywhere from 8db to 12db.

Uniquely the VT-RX-SC2U digital receiver can also supply analog data reception outputs suitable for legacy operation, such as analog Video reception, and improved performance AM down to below  $-125\text{dBm}$  for use with Auto Tracking antenna systems.

**Manufacturer (OEM):**

JDA Systems, Gutenbergstrasse 4,  
26632 Ihlow Riepe, Germany  
Tel: +49-4928-91560; E-mail: sale@jda-tele.com

**American Distributor:**

5K Technologies LLC  
1030 Cox Avenue  
Tel: (215) 934-1598 E-mail: sales@5K-Tech.com

## VT-RX-SC2U Receiver Features

- Two Fully Digital Direct Conversion Receivers Per Chassis
- All Band Operation of 70MHz to 6GHz with 1KHz tuning resolution
- Compact and low power design
- Rugged construction
- Best in class performance
- RF SMA female inputs @ 50Ohm, VSWR < 1.5
- Post Detection Combiner
- Receives AM, FM, PM, BPSK, QPSK, AQPSK, AUQPSK, OQPSK, SOQPSK, VIDEO PM demodulation loss 1.5dB (max) @ 1Mbps/1rad
- 0.4 to 1.5 rad @ PM 1Mbps BIØ-L
- BPSK/QPSK output unique digital root Nyquist (square) relating to output bandwidth
- Programmable tracking BW to +/-200kHz with 1KHz resolution
- Fully Programmable input BW and Input Filter with 1Hz resolution
- Low Total Noise of Less Than 4dB
- High Absolute Sensitivity < -125 dBm
- RF input maximum level -10dBm
- AGC with automatic response setting 1 to 100mSec
- Wide Band Operation greater than 30 MHz
- Digital Trellis Based Dual Bit Syncs 8kbps to >15 Mbps with 1Hz resolution
- Data types NRZ-L/M/S, RZ, BIØ-L/M/S, DM-M/S, M2-M/S, RNRZ-L9/11/15/17/23
- Mini BNC analog outputs 0-5V AGC1, AM1, FM1 (Video), AGC2, AM2, FM2(Video)
- TTL level Data1, Clock1, Lock1, Data2, Clock2, Lock2
- RJ45 100MB Ethernet Remote Control & Monitoring Interface



- TCP/IP Direct Receiver Interface
- Dual RS232 pass through ports
- AGC Signal Level and Time Broadcast at 20Hz
- Embedded 9-axis INU with 10Hz to 100Hz Broadcast
- BIT Self Test: 0 Operational, 1 Startup, 2 DSP Initialize, 3 RF Initialize, 4 Comm Error, 5 Message Error, 6 Time Lost.
- USB Remote Control Interface
- Easy to use Windows Compatible Graphic User Interface
- Analog Outputs for AGC, AM and data suitable for legacy Video Reception and Auto Tracking Antenna Control
- Dimensions mm 160W x 112W x 42H
- Weight 815g
- 6V-12V DC Operation
- Less Than 7W Heat Dissipation



### Manufacturer (OEM):

JDA Systems, Gutenbergstrasse 4,  
26632 Ihlow Riepe, Germany  
Tel: +49-4928-91560; E-mail: sale@jda-tele.com

### American Distributor:

5K Technologies LLC  
1030 Cox Avenue  
Tel: (215) 934-1598 E-mail: sales@5K-Tech.com