

### VPXST-6500 Series

VPXST-6500-UCDC DUAL CHANNEL UP & DUAL CHANNEL DOWNCONVERTER

VPXST-6500-DC FOUR CHANNEL DOWNCONVERTER

VPX, 2 SLOT, 6U

WIDE FREQUENCY RANGE: 2 to 18 GHz, 1GHz BW

#### **APPLICATIONS**

- Electronic Warfare (ECM)
- Monopulse RADAR Receivers
- Radar Warning Receiver (RWR)
- Real Time Spectrum Analysis (RTSA)

#### **FEATURES**

- Wide Frequency Tuning Range: 2 to 18 GHz (other bands, contact factory)
- 1GHz BW L-Band Output
- Ultra Fast Tuning
- Two/Four Phase Matched Tuners in 6U VPX, 2 Slot Wide
- Two Up Converter/ Two Down Converter in 6U VPX, 2 Slot Wide
- Option for Two independent Synthesizers (LO's)
- Phase Coherent Switching



#### SPECIFICATIONS AT 25°C

#### **DOWNCONVERTER SPECIFICATIONS**

**FREQUENCY** 

Input Tuning Range: 2 – 18 GHz
Synthesizer Tuning Speed: 1 microsecond

**RF SECTION** 

Noise Figure: 15 dB, typ

RF Attenuation 60 dB, 1 dB step

Gain: 15 dB

DYNAMIC RANGE

Image Rejection: >80 dB

Internally Generated Spurious: -70 dBc max

Input IP1: -5 dBm

WIDEBAND L BAND OUTPUT

Center Frequency: 1.8 GHz (contact factory for other options)

Bandwidth (3dB): 1 GHz

Gain Flatness Over IF BW: +/- 1.5 dB (typical over 800 MHz)

Gain Control: 15 dB, 1 dB step

Group Delay: 1.5 nsec over 80% of BW

<sup>\*</sup>Specifications are subject to change without notice.



#### SPECIFICATIONS AT 25°C

#### **UPCONVERTER SPECIFICATIONS**

**FREQUENCY** 

Output Tuning Range: 2 – 18 GHz
Synthesizer Tuning Speed: 1 microsecond

**RF SECTION** 

Noise Figure: 12 dB, typ

RF Attenuation 40 dB, 1 dB step

Gain: 20 dB

**DYNAMIC RANGE** 

Image Rejection: >80 dB

Internally Generated Spurious: -75 dBm max
In Band Spurious: <-60 dBc
Output P1dB: 15 dBm

#### WIDEBAND L BAND INPUT

Center Frequency: 1.8 GHz (contact factory for other options)

Bandwidth (3dB): 1 GHz

Gain Flatness Over IF BW: +/- 1.5 dB (typical over 800 MHz)

Gain Control: 40 dB, 1 dB step

Group Delay: 1.5 nsec over 80% of BW

<sup>\*</sup>Specifications are subject to change without notice.



#### **ENVIRONMENTAL**

Operating Temperature Range: -20° to +70° C

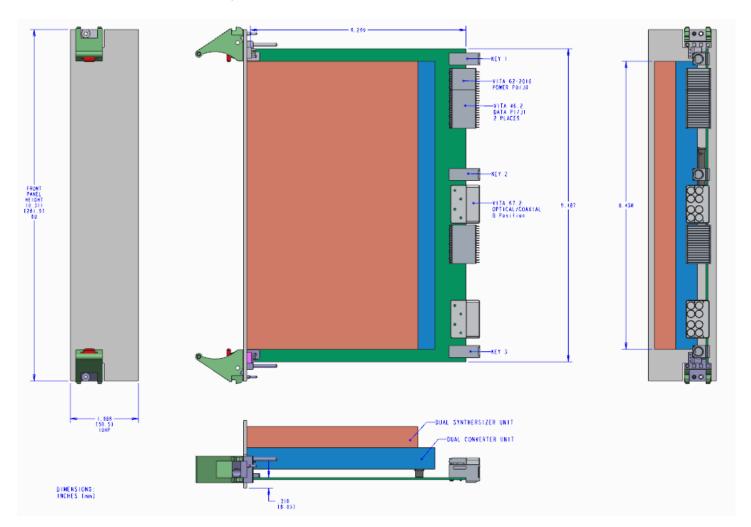
Power Consumption: 80 Watts (typ)

#### **MECHANICAL**

Size: VPX 6U, two slot wide

Weight: 3.5 Pounds

\*Specifications are subject to change without notice.





### **Ordering Matrix**

Frequency Range	Channel Types	Unit Part Number
2 – 18 GHz	2 DC & 2 UC	VPXST-6500-UCDC
2 – 18 GHz	4 DC	VPXST-6500-DC

#### ABOUT FEI-ELCOM TECH, Inc.

Elcom designs and manufactures instruments and modules in the RF and Microwave frequency spectrum for broadband and narrow band applications in ATE, Aerospace/ Defense, SIGINT and commercial communications. Proprietary technologies include low phase noise fast switching direct analog synthesis, low noise indirect PLL designs, and RF DSP up to 40GHz.

#### FOR ADDITIONAL INFORMATION PLEASE CONTACT

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