

**SATCOM TRANSMITTER**

# Up-Converter

## Up-Converter UC5110



### TYPICAL SPECIFICATIONS

**[Frequency]**

|  |                             |
|--|-----------------------------|
| <b>Output frequency</b>                        | 5070 to 5270 MHz            |
| <b>Input frequency</b>                         | 840 to 1040 MHz             |
| <b>LO frequency</b>                            | 4230MHz                     |
| <b>Frequency sense</b>                         | No inversion                |
| <b>Internal reference<br/>Signal frequency</b> | 10MHz                       |
| <b>Frequency stability</b>                     | ±1ppm @10MHz ref. frequency |

**[IF input characteristics]**

|                           |                      |
|---------------------------|----------------------|
| <b>IF input level</b>     | +0dBm max            |
| <b>IF input connector</b> | SMA-female (50 Ohms) |
| <b>Input return loss</b>  | 1.5:1 max            |

**[RF output characteristics]**

|                            |  |
|----------------------------|--|
| <b>RF output level</b>     | +10dBm max   |
| <b>Spurious</b>            | -36dBm   |
| <b>RF output connector</b> | SMA-female (50 Ohms)   |
| <b>Phase noise (SSB)</b>   | -70dBc/Hz max @1KHz<br>-75dBc/Hz max @10KHz<br>-85dBc/Hz max @100KHz |
| <b>Output VSWR</b>         | 1.5:1 max  |

**[Transfer characteristics]**

|                      |                       |
|----------------------|-----------------------|
| <b>Gain</b>          | 10 to 30dB ±2dB       |
| <b>Gain control</b>  | Δ20dB, 1dB step       |
| <b>Gain flatness</b> | ±1.5dB over full band |

**[Power]**

|                          |                            |
|--------------------------|----------------------------|
| <b>Power requirement</b> | 90 – 250 VAC<br>47 – 63 Hz |
| <b>Power consumption</b> | 40W max                    |

**[Mechanical & Environmental]**

|                       |                            |
|-----------------------|----------------------------|
| <b>Physical size</b>  | 1U, 19 inch rack mountable |
| <b>Operating temp</b> | -10 to 55 °C               |

**[Front/Rear panel]**

|                                    |  |
|------------------------------------|--|
| <b>Front panel indicator (LED)</b> | Power status<br>RF output status   |
| <b>Gain control &amp; monitor</b>  | Gain control through Up and Down buttons on the front panel.<br><br>Display current gain on the front panel. |
| <b>Rear panel interface</b>        | AC Power Input<br>IF input<br>RF output  |

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### OUTLINE DRAWING AND INTERFACE

