

## FEATURES:

- 0.5 - 18.0 GHz FREQUENCY RANGE
- FOUR CHANNELS
- 1.0 GHz IF CENTER FREQUENCY
- 100 ns SWITCHING TIME
- EXTERNAL VARIABLE LO
- BUILT-IN LO1 PROCESSING
- BUILT-IN LO2
- INTEGRATED DC-DC CONVERTER/  
POWER SUPPLY
- LO PRESENCE MONITOR
- CHANNEL TEMPERATURE MONITORING
- MODULAR DESIGN



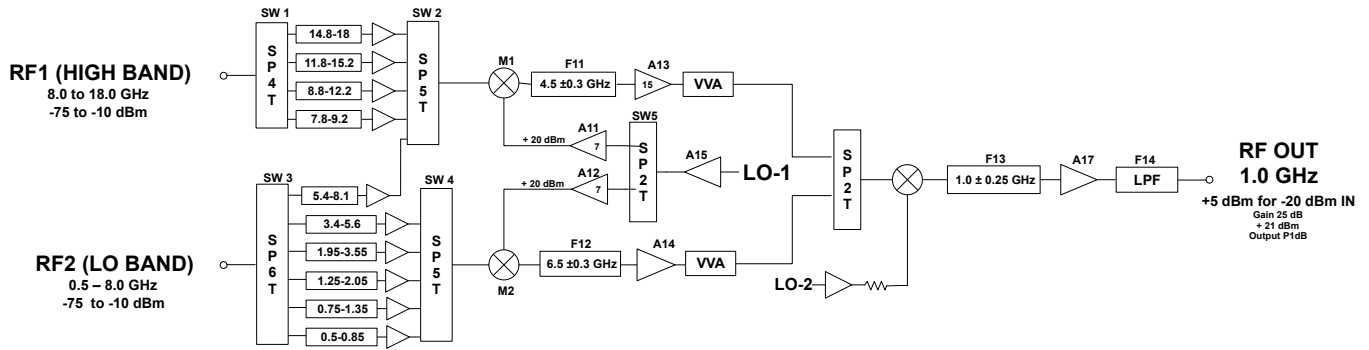
AKON's A20-MX209 is a compact four channel tuner system that provides RF to IF conversion, pre-selection, and gain equalization. The modular design consists of 4 tuners, which each tuner handling 2 input bands from 0.5 - 18.0 GHz and 1 IF output at 1 GHz (single RF input from 0.5 - 18.0 also available) and features built-in LO1 amplification, filtering and multiplication using "high side" LOs. The unit also features an integrated DC-DC converter and LO presence and channel temperature monitoring.

## SPECIFICATIONS:

Model Number	A20-MX209
Frequency Range (GHz)	0.5 to 18.0
Number of Input Channels	2 (0.5 - 8.0, 8.0 - 18.0 GHz)
Input Impedance (Ohms)	50 (nom)
Power Levels (dBm)	-75 to -10
Recovery Time ( $\mu$ S)	1 (max)
IF Output Channels	4
IF Center Frequency (GHz)	1
IF Bandwidth (MHz)	500 +/- 250 @ 1 GHz Fc
Preselector Filter Rejection (dBc)	-60 +/- 15% Fc
IF Output Power (dBm)	+28 (max)
1 dB Compression point (dBm)	+21 (min)
Third-Order Intercept (dBm)	+30 (min)
Output VSWR	1.5:1 (max)
Channel to Channel Isolation (dB)	60 (min)
Gain (dB)	+25 (nom)
Noise Figure (dB)	10 (nom); 11 (max) (below 8 GHz) 11 (nom); 12 (max) (above 8 GHz)
Spurious Levels (dBc)	-60 (max)
Switching Time (ns)	100 (max)
Power Supply (VDC)	+12 +/- 3%
Power Consumption (W)	70
Size (Inches)	9.95 x 4.74 x 3.55

Note: All dimensions are specified in inches (mm)

### TUNER BLOCK DIAGRAM:



### OPTIONAL CONFIGURATION (SINGLE 0.5 - 18 GHz INPUT):

