L520 Block Downconverter in a 1 for 1 Redundant System using the RCU100

The Downconverter system consists of a fully integrated pair of Ku Band to L Band Downconverters with the RCU100 Redundancy control unit. The system is housed in 3 separate 1’U’ high 19” rack mounted chassis. The L520 Ku Band Downconverters units convert Ku Band signals to L Band while the RCU100 Redundancy control unit monitors the health of the converters and allows signal path control to be made.

![System Block Diagram](image)

Fig.1 System Block Diagram

The L520 Ku Band Downconverters unit consists of a Ku to L Band Block Downconverter with a Local Oscillator locked to a high grade ovenised crystal to give excellent short and long term stability. This unit can be used with or without the RCU100 Redundancy control unit as a single thread Downconverter. The L520’s are designed to show the status of the unit on the front panel and output this condition for external use.
The L520 Ku Band Downconverters and RCU100 Redundancy control units are housed in 19 inch 1'U' high chassis, suitable for rack mounting. They are 400 mm deep and may be fitted with rack slides if required.

![Diagram of L520 and RCU100](image)

**Fig.2 Rear Panel Configuration**

The L520 Ku Band Downconverters/RCU100 Redundancy control system unit may be monitored and controlled remotely either via a RS485 multidrop bus. The connection is made via the 9 way D type on the rear of the RCU100.