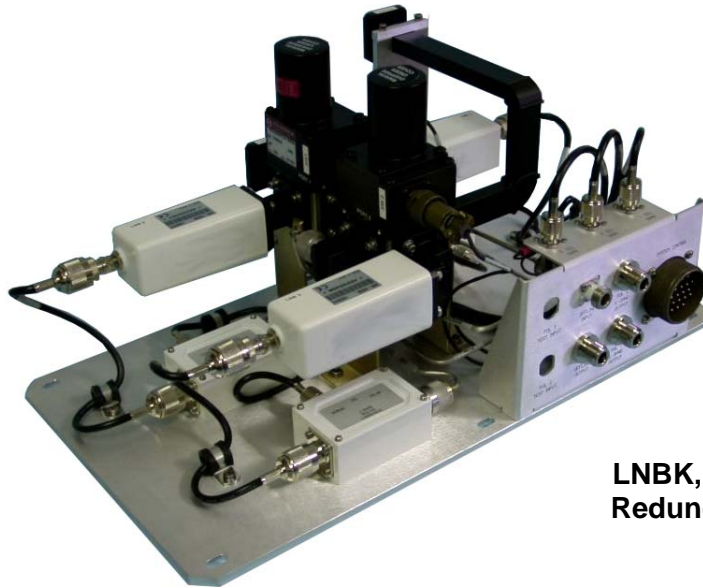


Redundant LNB Systems



**LNBK, Ku-Band
Redundant LNB
System**



RCP2-1100 Redundant Controller

DESCRIPTION

The LNB Series Low Noise Block Down Converter Systems provide the ultimate system reliability by providing complete back up operation. The LNB series redundant system utilizes the RCP2-1100 redundant controller to provide fault detection and switchover in the event of a Low Noise Block Down Converter failure.

Paradise Datacom can provide dual 1:1 redundant systems, 1:2 redundant systems, and a wide variety of custom systems. The outdoor equipment consists of the switch plate assembly and the Low Noise Block Down Converters and associated components. The indoor controller provides complete visual indication of switch position, fault detection, and system status.

FEATURES

- Reliable, weather sealed outdoor equipment
- Manual or Automatic Switchover on fault
- 1 Rack Unit high indoor controller
- 1:1, 1:2 or Dual 1:1 system configurations
- Standard 30m control cable
- Universal input AC power supply on controller
- LNB bias supplied by indoor controller

OPTIONS

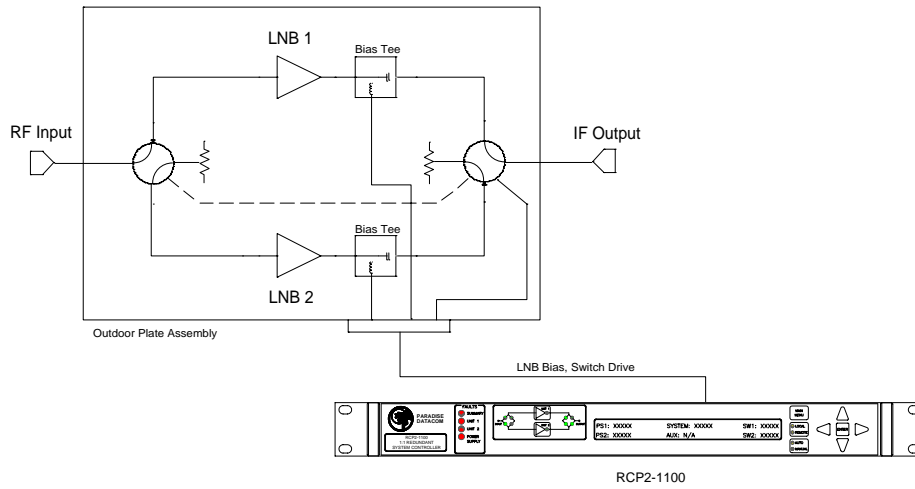
- TX Reject Filters
- Offline Input Coupler
- LNB Output Switching and combining
- Internal or External reference
- Offline & Test Ports
- Custom frequency bands

SPECIFICATIONS

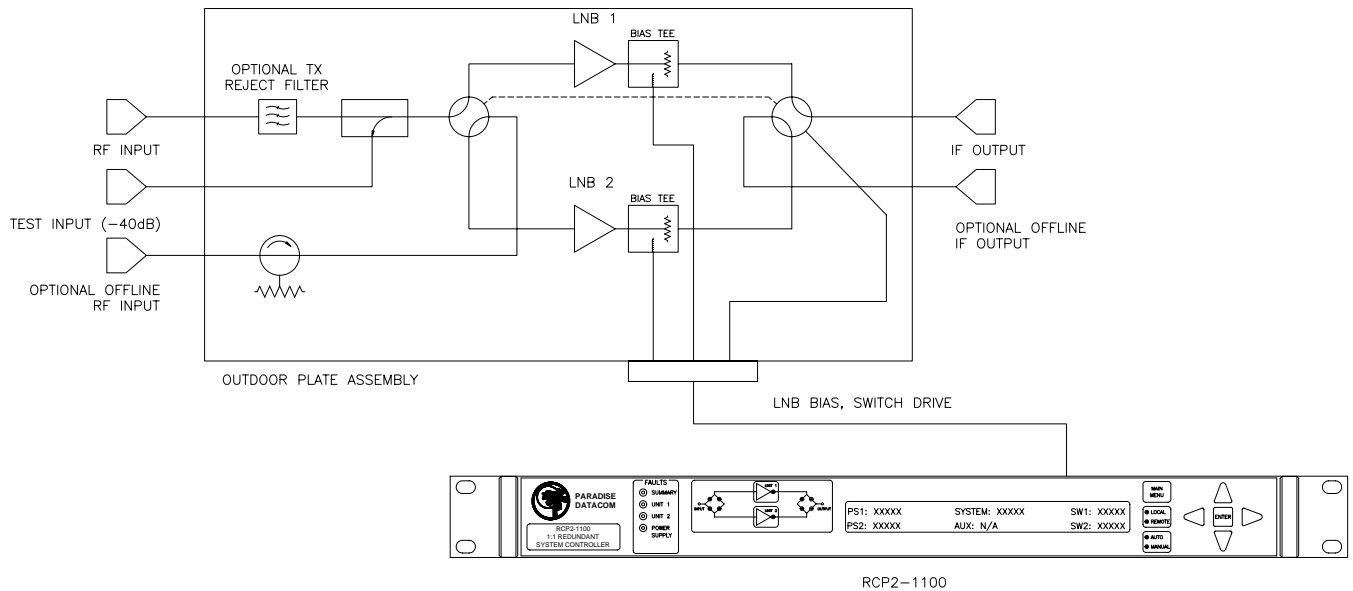
- IF Output Frequency:
950-1750 MHz C-Band;
950-1450 MHz Ku-Band
- Conversion Gain: 55-70 dB
- Input/Output VSWR: 2.2:1
- Spurious: -50 dBc
- Input Power (+15 to +24 VDC):
350 mA max C-Band;
500 mA max Ku-Band
- Output Power (P1dB):
+5 dBm C-Band;
+7 dBm Ku-Band

Redundant LNB Systems

Typical System Block Diagrams



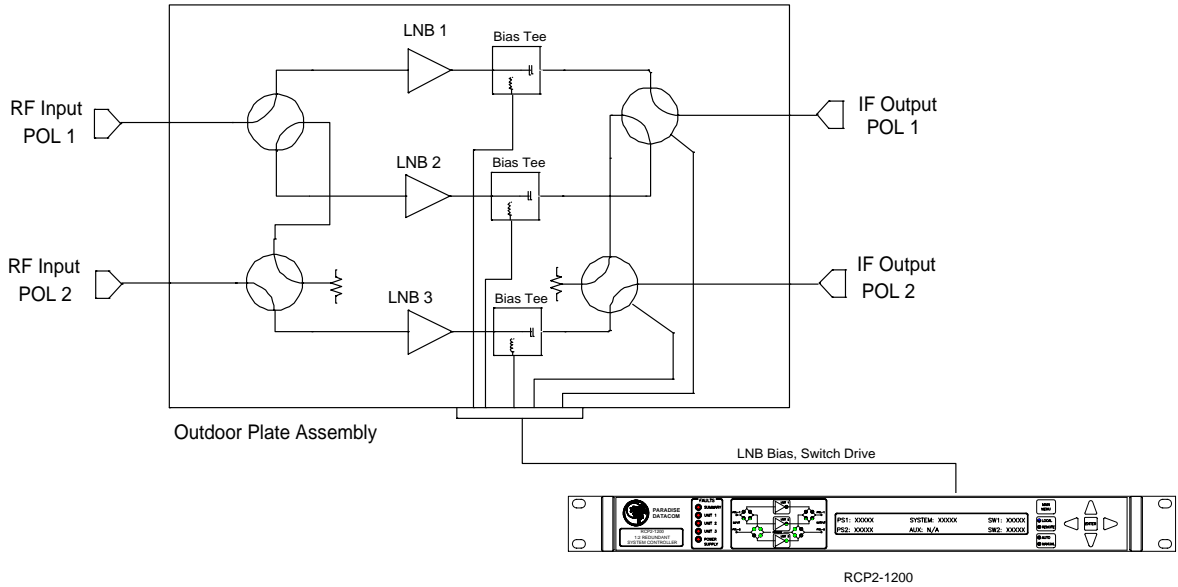
Standard 1:1 Redundant System, with output switching



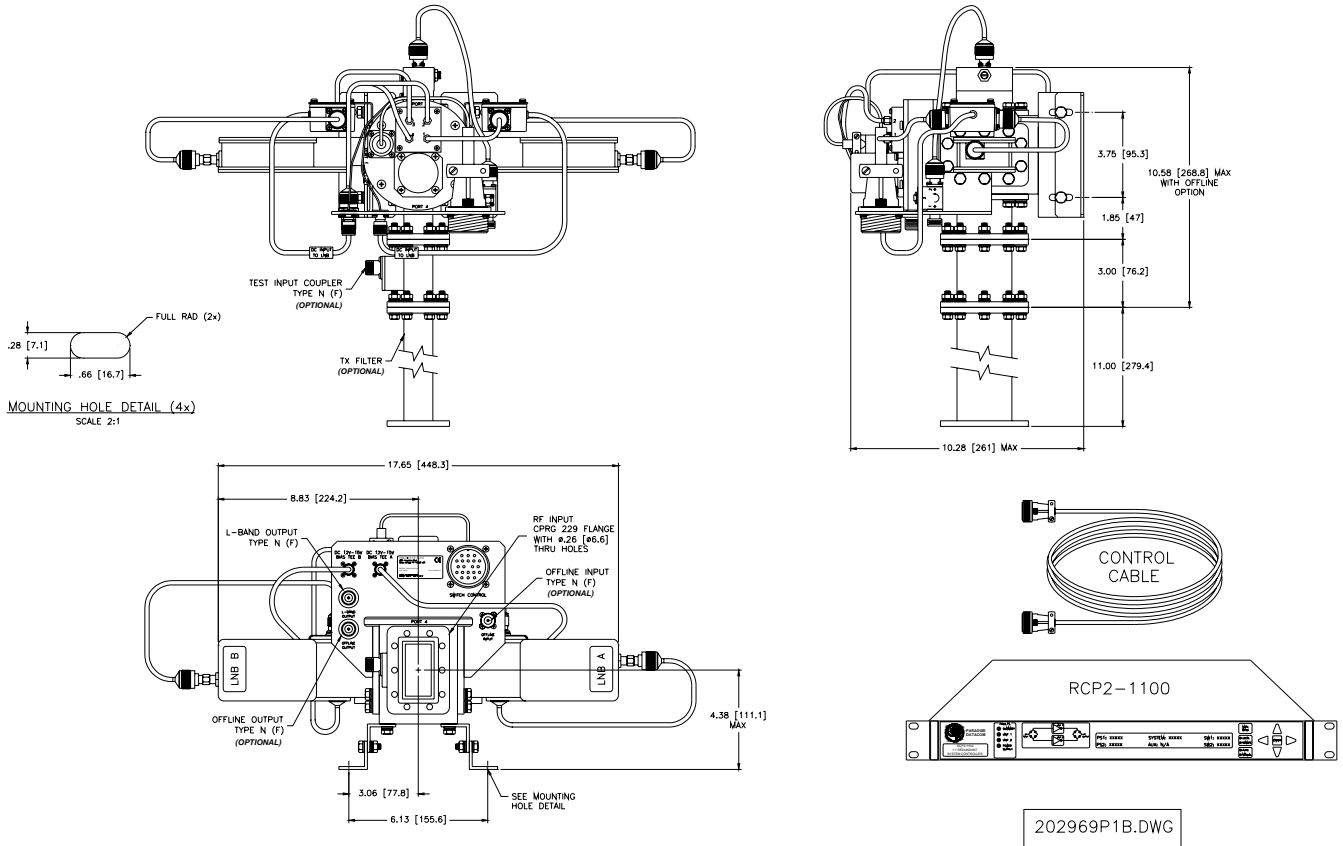
1:1 LNB System with optional test input port, offline ports, TX reject filter,

Redundant LNB Systems

Typical System Block Diagrams



Standard 1:2 Redundant System, shown with output switching



C-Band 1:1 Redundant LNB System with RCP2-1100 and control cable

Redundant LNB Systems



Typical LNB Specifications

PARAMETER	C-Band	Ku-Band
Standard Band with Internal Reference (± 5 kHz) Local Oscillator Frequency Norsat LNB Part #	3.400 - 4.200 GHz 5.15 GHz 3120N	11.70 - 12.20 GHz 10.75 GHz 1507HAN
LNB Option 1 External Reference (IDU Ref stability) Local Oscillator Frequency Norsat LNB Part #	3.400 - 4.200 GHz 5.15 GHz 3025XN	11.70 - 12.20 GHz 10.75 GHz 1009XAN
LNB Option 2 with Internal Reference (± 5 kHz) Local Oscillator Frequency Norsat LNB Part #		10.95 - 11.70 GHz 10.0 GHz 1507HCN
LNB Option 4 with Internal Reference (± 5 kHz) Local Oscillator Frequency Norsat LNB Part #		12.25 - 12.75 GHz 11.30 GHz 1507HBN
LNB Option 5 External Reference (IDU Ref stability) Local Oscillator Frequency Norsat LNB Part #		10.95 - 11.70 GHz 10.0 GHz 1009XCN
LNB Option 6 External Reference (IDU Ref stability) Local Oscillator Frequency Norsat LNB Part #		12.25 - 12.75 GHz 11.3 GHz 1009XBN
IF Output Frequency	950-1750 MHz	950-1450 MHz
Input Waveguide/Flange	CPR-229 Grooved	WR-75 Grooved
Output Connector Internal Reference LNB External Reference LNB	Type N female Type N female	Type N female Type N female
RX Noise Figure (typical)	25 K	0.7 dB
LNB Conversion Gain, 60dB typical	55-70 dB	55-70 dB
Gain Flatness (any 40 MHz band)	± 0.5 dB	± 1.5 dB pp
Output Power, P1dB	+5 dBm	+7 dBm
Input / Output VSWR	2.2:1	2.2:1
Output Third Order Intercept	+20 dBm	+17 dBm
Image Rejection	40 dB	50 dB
Group Delay Variation (any 40 MHz band)	< 10 ns	< 30 ns
Spurious	-50 dBc	-50 dBc
Typical Phase Noise	100 Hz 1 KHz 10 KHz 100 KHz	-60 dBc /Hz -75 dBc/Hz -80 dBc/Hz -85 dBc/Hz
Input Power, +15 to +24 VDC	350 mA max	500 mA max

Specifications are subject to change.

Redundant LNB Systems

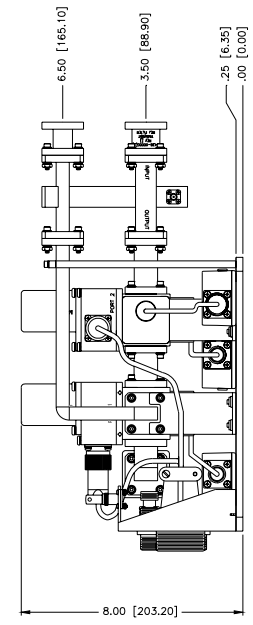
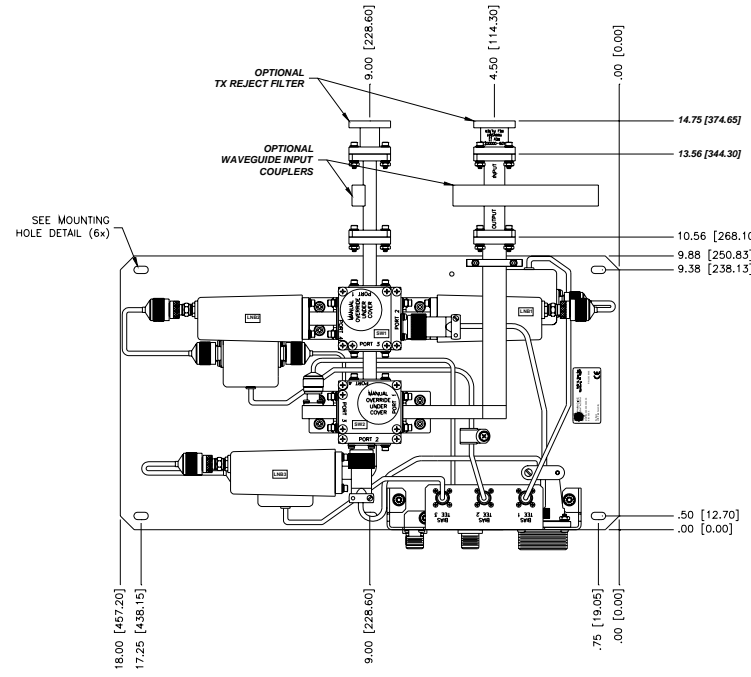
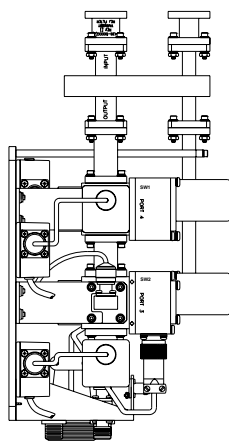
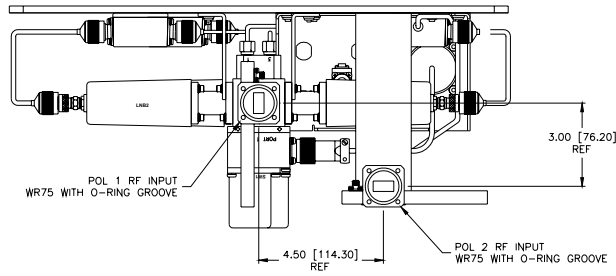


**PARADISE
DATACOM**
AN INTELK PLC COMPANY

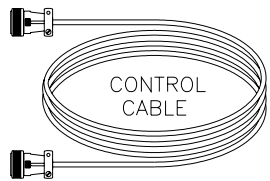
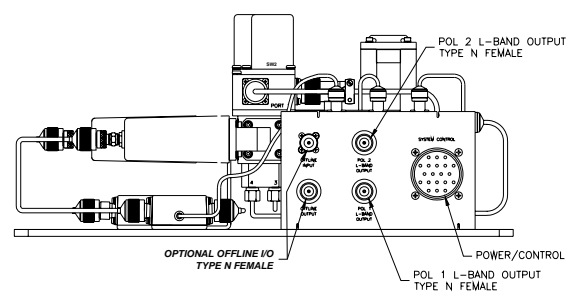
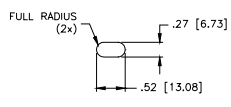
NOTES:

- 1 DIMENSIONS ARE IN INCHES [XX.X] IS mm.
- 2 STANDARD RF INPUT FLANGES HAVE 0.154 THRU HOLES. WHEN USING OPTIONAL TX REJECT FILTERS, RF INPUT FLANGES HAVE M4 TAPPED HOLES.

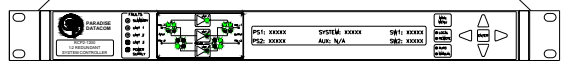
2028E2P1B.DWG



MOUNTING HOLE DETAIL
SCALE 1:1



RCP2-1200

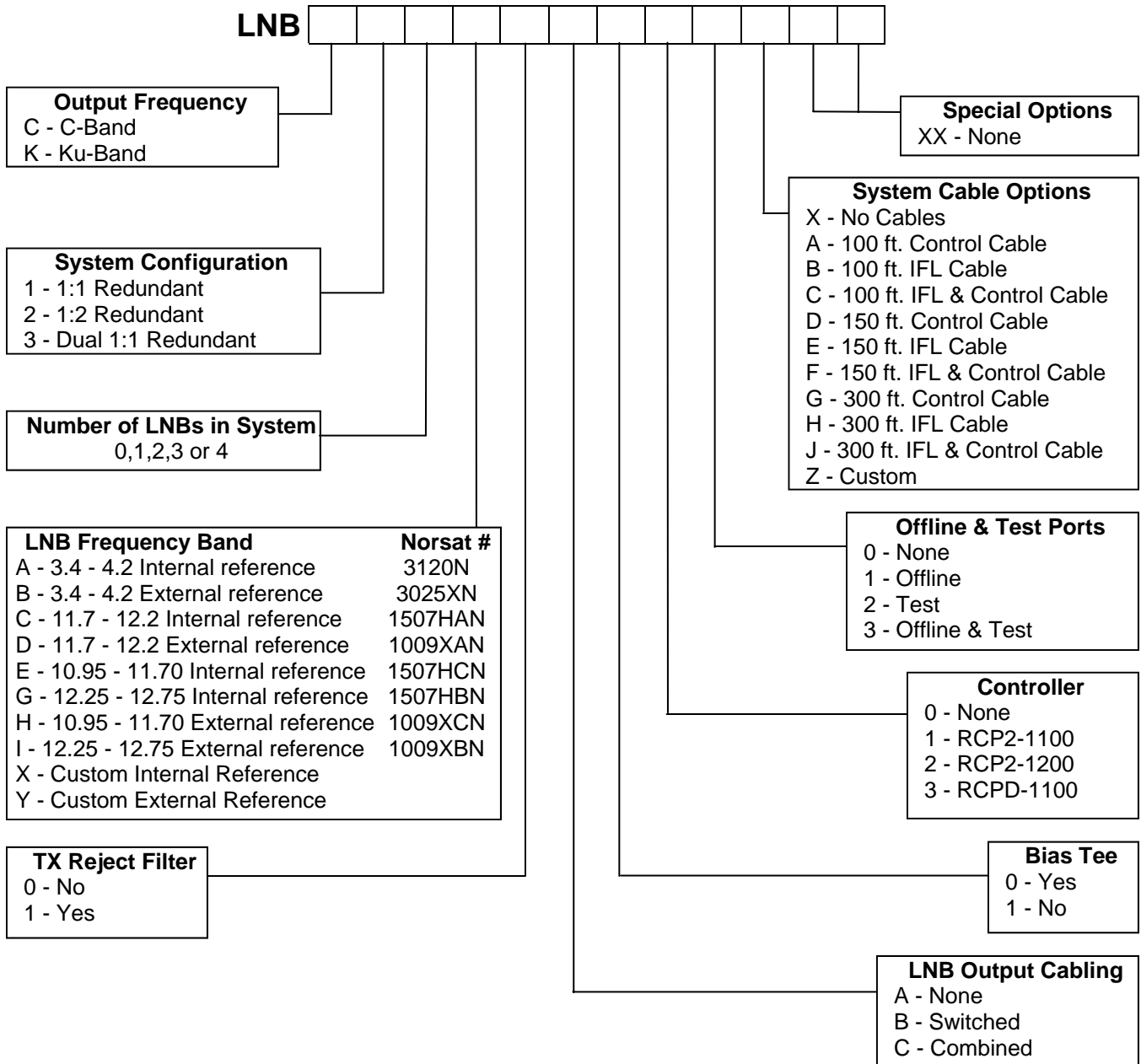


Ku-Band 1:2 Redundant LNB with RCP2-1200 and control cable

Redundant LNB Systems



Model Number Configuration



Example: A 1:1 C-Band redundant system with TX reject filter and bias tees with no cables; the part number is: LNBC12A1A010XXX