



DESCRIPTION

Paradise Datacom's Redundant Control Panel for Dual 1:1 Systems (RCPD-1100-LX) provides control of an entire VSAT Transceiver system.

Available in two models, the RCPD-1100-L1 model is used in single L-band source systems; the RCPD-1100-L2 model is used in dual L-band source systems.

Its combination of switch drive output and LNB bias, along with its capacity for external alarm inputs, enable the RCPD-1100 to be enabled in a variety of system configurations.

To achieve this functionality, the RCPD-1100 can control two waveguide switches for the outdoor portion of the system, and optionally two coaxial switches at the system input.

Control of the RCPD-1100 can be handled through front panel operation, or remotely through a parallel or serial connection to a computer.

Two separate power supplies are provided for fully redundant operation. Either of the two supplies is capable of operating the system and its associated switches.

If fault alarms are detected in the on-line transceiver system, the RCPD-1100 can be programmed to provide immediate switchover to the stand-by transceiver.

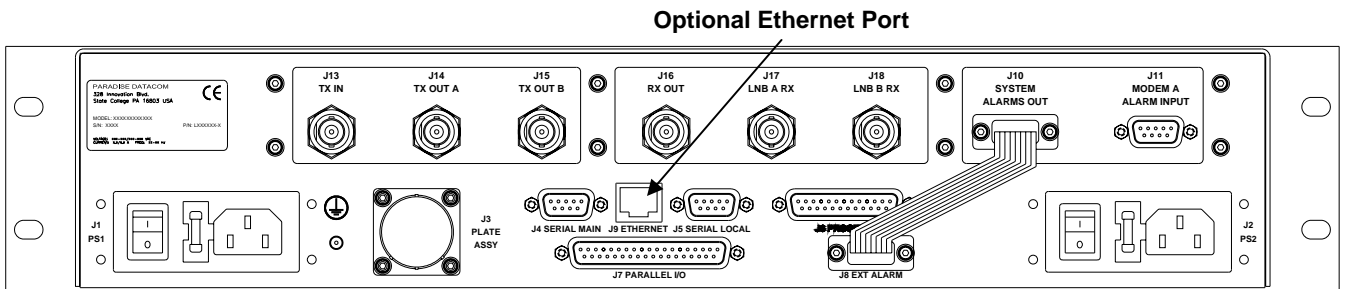
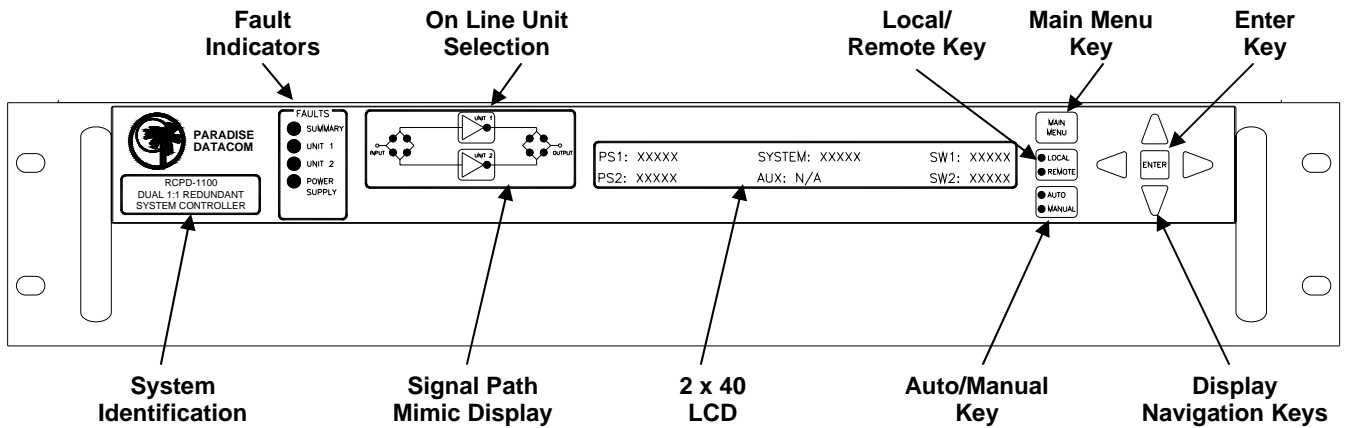
FEATURES

- Front panel or remote operation.
- Redundant power supplies.
- A wide range of I/O connections from the rear panel.
- User-programmable fault resolution.
- 2 line by 40 character Liquid Crystal Display
- Easy-to-navigate firm-ware menu structure
- 2 Rack Units high
- Optional Ethernet Port

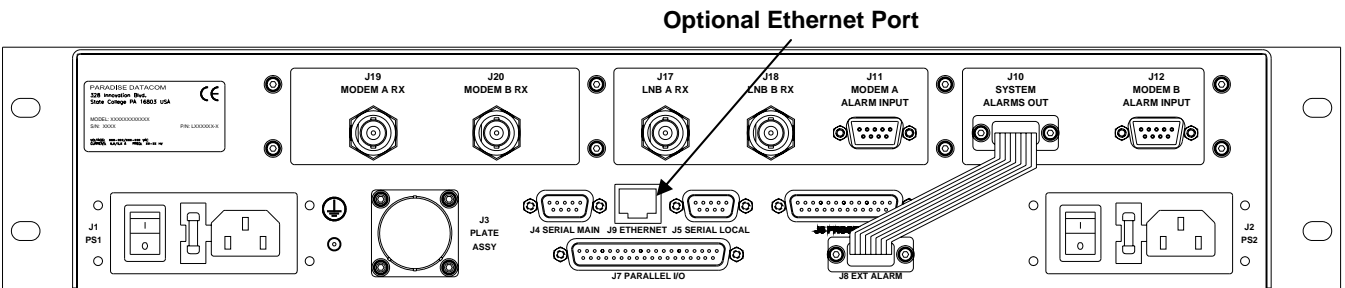
AT A GLANCE

The front panel displays which unit in a redundant system is online, and allows monitoring of the following fault states:

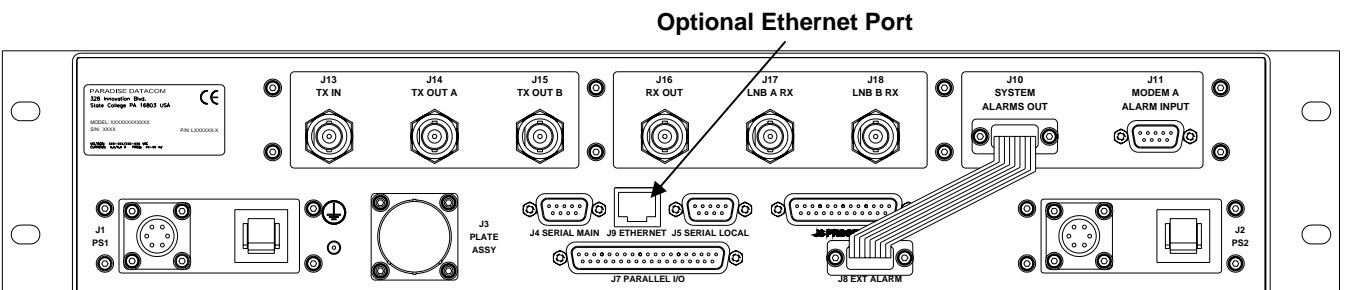
- Summary
- Unit 1
- Unit 2
- Power Supply
- Auto / Manual Switch Mode
- Local / Remote Control



RCPD-1100-L1 Controller Rear Panel I/O connections



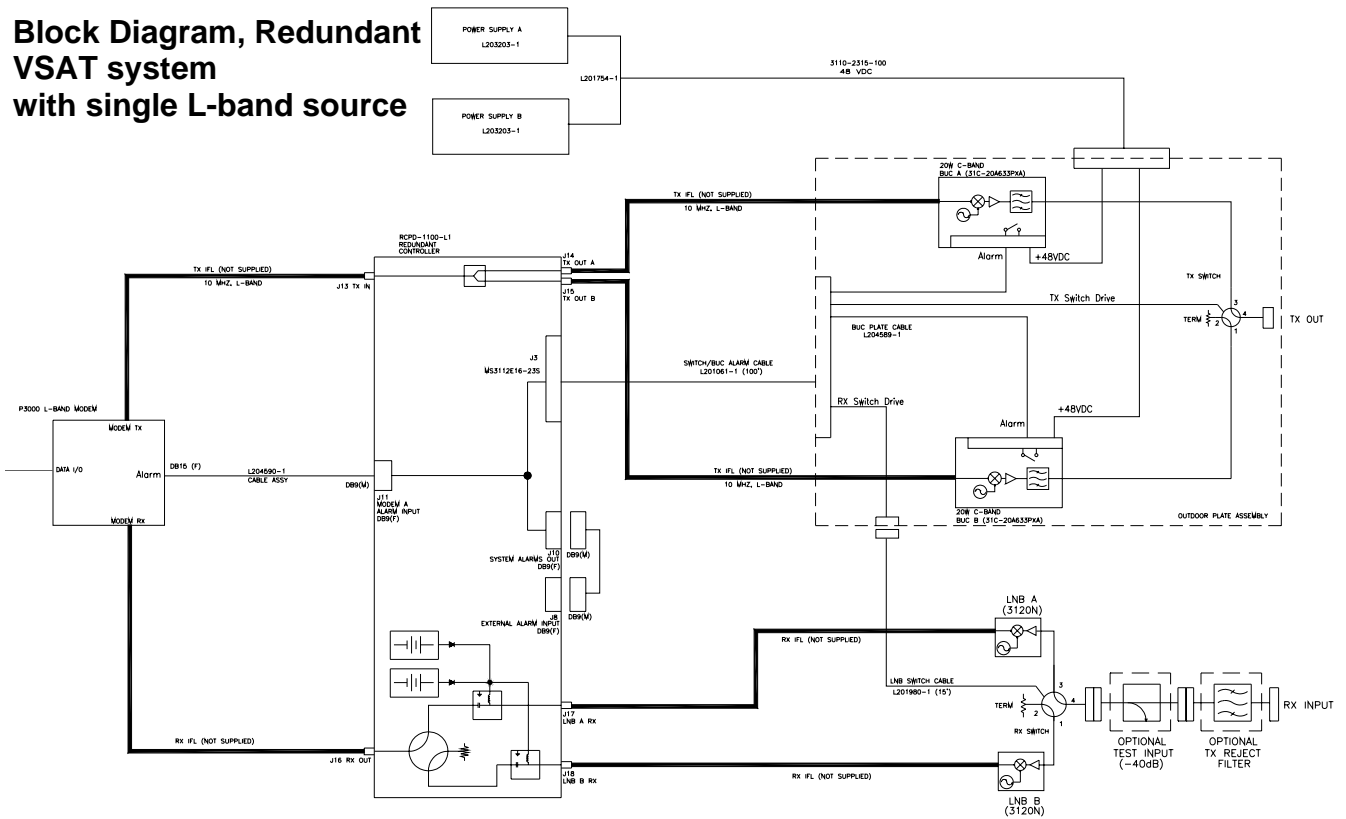
RCPD-1100-L2 Controller Rear Panel I/O connections



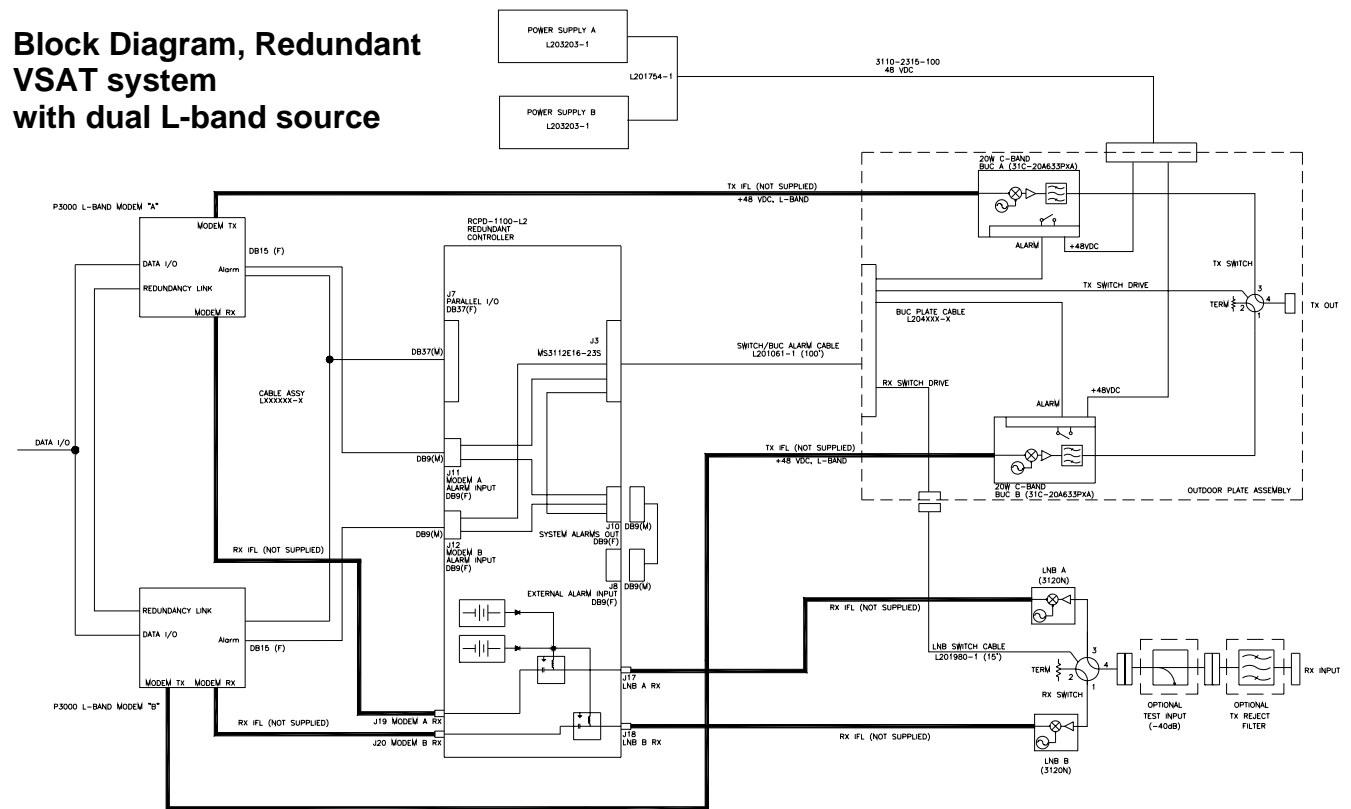
RCPD-1100-L1 Controller Rear Panel with optional DC power input



**Block Diagram, Redundant
VSAT system
with single L-band source**



**Block Diagram, Redundant
VSAT system
with dual L-band source**





J3 Pin-outs - MS3112E16-23S		J4 Pin-outs - DB9 (F)		J7 Pin-outs - DB37 (F)		
Pin	Identification	Pin	Identification	Pin	Identification	Function
L	BUC B Fault	1	RS-485 TX+	1	Amp 1 Alarm	Closed on Fault
J	BUC A Fault	2	RS-232 Out or RS-485 TX-	20	Amp 1 Alarm	Common
G	N/C	3	RS-232 In or RS-485 RX-	2	Amp 1 Alarm	Open on Fault
E	N/C	4	RS-485 RX+	21	Amp 2 Alarm	Closed on Fault
B	N/C	5	Ground	3	Amp 2 Alarm	Common
D	Switch Common, +26 VDC, 5A max	6	Service Request 1	22	Amp 2 Alarm	Open on Fault
W	Switch #1, Position 1 (Tx)	7	Service Request Common	4	Not Applicable	
U	Switch #1, Position 1 (Tx)	8	Service Request 2	23	Not Applicable	
P	Switch #1, Position 2 (Tx)	9	Termination (120 Ohm)	5	Not Applicable	
S	Switch #1, Position 2 (Tx)			24	Auto / Manual Mode	Closed on Manual
F	Switch Common, +26 VDC, 5A max	J5 Pin-outs - DB9 (F)		6	Auto / Manual Mode	Common
H	Switch Common, +26 VDC, 5A max	Pin	Identification	25	Auto / Manual Mode	Closed on Auto
T	Switch #2, Position 1 (Rx)	1	RS-485 RX+	7	Local / Remote Mode	Closed on Local
V	Switch #2, Position 1 (Rx)	2	RS-232 In or RS-485 RX-	26	Local / Remote Mode	Common
N	Switch #2, Position 2 (Rx)	3	RS-232 Out or RS-485 TX-	8	Local / Remote Mode	Closed on Remote
R	Switch #2, Position 2 (Rx)	4	RS-485 TX+	27	Switch #1 Position	Switch #1, Position 1
A	AMP Support GND	5	Ground	9	Switch #1 Position	Common
C	AMP Support GND	9	Termination (120 Ohm)	28	Switch #1 Position	Switch #1, Position 2
K	Switch Common, +26 VDC, 5A max			10	Switch #2 Position	Switch #2, Position 1
M	Switch Common, +26 VDC, 5A max			29	Switch #2 Position	Common
				11	Switch #2 Position	Switch #2, Position 2
				30	Power Supply #1 Alarm	Closed on Fault
				12	Power Supply #1 Alarm	Common
				31	Power Supply #1 Alarm	Open on Fault
				13	Power Supply #2 Alarm	Closed on Fault
				32	Power Supply #2 Alarm	Common
				14	Power Supply #2 Alarm	Open on Fault
				33	Priority Setting	Closed on Priority 2
				15	Priority Setting	Common
				34	Priority Setting	Closed on Priority 1
				16	Auxiliary Input	Ground to Activate
				17	Priority Select	Ground to Activate
				18	Auto / Manual	Ground to Activate
				35	Amp 3 Standby	Ground to Activate
				36	Amp 2 Standby	Ground to Activate
				37	Amp 1 Standby	Ground to Activate
				19	Ground	

RCPD-1100-LX General Specifications	
CHARACTERISTIC	SPECIFICATION
Configurations	RCPD-1100-L1, Single L-band source; RCPD-1100-L2, Dual L-band source
Switch Time	Fault Detection, 20-50 msec
	Total Switchover, 100 msec maximum
Switch Drive	26 VDC @ 4 amps
Alarm Input	Closure to Ground, (Ground=OK / Open=Fault)
Serial Communications	RS-232 / RS-485 4-wire
Parallel I/O	
Status Outputs	Form C Relay Contacts (10 sets)
Control Inputs	Contact Closure to Ground
AC Input Power	85-265 VAC, 47-63 Hz, 1 A max, >0.93 power factor
Mechanical Dimensions	3.5 in. H x 19 in. W x 13.3 in. D [2 RU]
	(89 mm H x 483 mm W x 338 mm D)
Weight	6 lbs. (2.8 kg)
Environmental temperature	0-50 °C