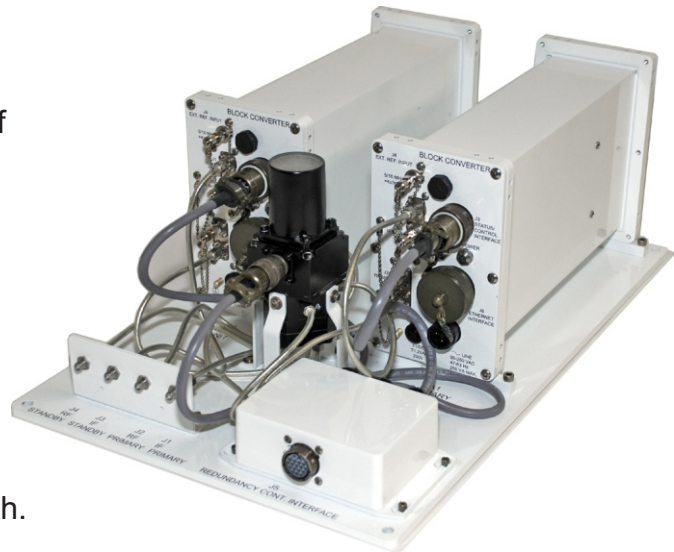


**INDOOR CONTROL UNIT**

The Hub-mounted 1:1 and 1:2 Redundant Converter Systems are designed to ensure continuous operation with minimum disruption of signal transmission. The 1:1 and 1:2 Redundant Converter System consists of an outdoor converter/switch assembly which mounts at the antenna hub, rack-mounted indoor local control unit and interconnection control cable.

A fault condition in the on-line converter, or an operator generated command, will switch the standby converter to the on-line position and remove the on-line converter from the signal path.

**PLATE ASSEMBLY
(1:1 Ku band shown)**

STANDARD FEATURES

- Fault tolerant design
- Priority channel settings
- Fully redundant, hot swappable power supplies
- Remote control via RS485/RS422 (user selectable) and Ethernet
- Automatic/manual control from both local and remote mode
- Remote status reporting
- Off-line input/output access
- Converter fault detection
- Weather resistant converter/switch plate assembly
- Time-stamped alarm and system event history

OPTIONS

- Interconnect cable length
- Converter options per Specification Sheet GS3-SPC

AVAILABLE BLOCK CONVERTERS (Refer to Specification Sheet GS3-SPC)

BLOCK UPCONVERTERS

Input (GHz)	Output (GHz)	LO (GHz)	Model Number
0.95-1.525	5.85-6.425	7.375	UBE-6.1-INV
0.95-1.75	5.85-6.65	4.9	UBE-6.25
0.95-1.35	6.7-7.1	5.75	UBE-6.9
0.95-1.45	7.9-8.4	6.95	UBE-8.15
0.95-1.45	12.75-13.25	11.8	UBE-13
0.95-1.7	13.75-14.5	12.8	UBE-14.125
0.95-1.45	14.0-14.5	13.05	UBE-14.25
0.95-1.75	17.3-18.1	16.35	UBE-17.7
0.95-2.05	17.3-18.4	16.35	UBE-17.85
0.95-1.25	18.1-18.4	17.15	UBE-18.25

BLOCK DOWNCONVERTERS

Input (GHz)	Output (GHz)	LO (GHz)	Model Number
3.4-4.2	0.95-1.75	5.15	DBE-3.8-INV
3.4-4.2	0.95-1.75	8.55/11	DBE-3.8
3.7-4.2	0.95-1.45	8.55/11.3	DBE-3.95
4.5-4.8	0.95-1.25	3.55	DBE-4.65
7.25-7.75	0.95-1.45	6.3	DBE-7.5 ^{*(Note 1)}
10.7-11.7	0.95-1.95	9.75	DBE-11.2
10.95-11.7	0.95-1.7	10.0	DBE-11.35
11.2-12.0	0.95-1.75	10.25	DBE-11.6
11.45-12.25	0.95-1.75	10.5	DBE-11.85
11.7-12.5	0.95-1.75	10.75	DBE-12.1
11.7-12.75	0.95-2.0	10.75	DBE-12.225
12.2-12.75	0.95-1.5	11.25	DBE-12.475

NOTE: 1. The DBE-7.5 Block Downconverter incorporates an inter-stage filter to attenuate the transmit frequency. Published performance will be maintained with a presence of a 7.9 GHz signal at a level of -5 dBm.

RF SPECIFICATIONS (Refer to Specification Sheet GS3-SPC)

REDUNDANT CONVERTER SYSTEM MODEL NUMBERS –

<p>Please note that each 1:1 System is supplied with: One (1) Plate Assembly, Model C1P- (Converter Model Number) consisting of: A. Plate and interconnecting cables B. Quantity two (2) converters C. Switch One (1) 1:1 Redundant Control Unit – Model R1R-GS17 One (1) 100 foot interconnection control cable (other lengths available) Model 200 000 160 – (Cable length)</p>	<p>Please note that each 1:2 System is supplied with: One (1) Plate Assembly, Model C2P- (Converter Model Number) consisting of: A. Plate and interconnecting cables B. Quantity three (3) converters C. Two (2) Switches One (1) 1:1 Redundant Control Unit – Model R2R-GS17 One (1) 100 foot interconnection control cable (other lengths available) Model 200 000 960 – (Cable length)</p>
---	---

CONVERTER CHARACTERISTICS (Each) -

PRIMARY POWER REQUIREMENTS	
Voltage.....	90-250 VAC
Frequency.....	47-63 Hz
Consumption	40W typical
Fuse.....	T1.25A
PHYSICAL	
Weight	6 pounds (2.7 kg) nominal
Connectors -	
RF.....	SMA female
L-band	N female
RF Monitor.....	SMA female
L-band Monitor	SMA female
External Reference	SMA female
Status/Control Interface	MS3116F14-18P for summary alarm, RS485, and converter power
Remote Interface	RJ-45 for Ethernet
Primary Power	FCI Clipper Series CL1M1102
ENVIRONMENTAL	
Operating -	
Ambient Temperature	-40 to +60°C
Altitude	Up to 10,000 feet
Non-operating -	
Ambient Temperature	-50 to +70°C
Altitude	Up to 40,000 feet
Shock and Vibration	Normal handling by commercial carriers

1:1 and 1:2 CONTROL UNIT and PLATE ASSEMBLY CHARACTERISTICS

CONTROL UNIT PRIMARY POWER REQUIREMENTS

Voltage.....	90-250 VAC
Frequency.....	47-63 Hz
Consumption	20W typical, 50W peak during switchover

SUMMARY ALARM CONTROL UNIT

Contact closure/open for DC voltage and/or amplifier alarm.
Status alarm readout on remote control bus

PHYSICAL

Primary Power Input	IEC-320
Summary Alarm Interface Mating Connector.....	DEM-9P
Remote Interface Connector	DEM-9S for RS485 and RS422, RJ45 for Ethernet
Control Unit Weight	10 lbs (4.54 kg)
Plate Assembly Weight	22 lbs (10 kg) nominal (consult factory)
Chassis Dimensions (Control Unit)	19" x 1.75" panel height x 20" maximum
Plate Dimensions.....	19 x 12 x 7.25 inches (483 x 309 x 184 mm)

ENVIRONMENTAL

Operating -

Ambient Temperature (Controller)	0 to 50°C
Ambient Temperature (Plate Assembly)	-40 to +60°C
	(For other ranges available, consult factory)
Atmospheric Pressure	Up to 10,000 feet

Non-operating –

Ambient Temperature	-50 to 70°C
Altitude	Up to 40,000 feet
Shock and Vibration	Normal handling by commercial carriers