



UPC2 UPLINK POWER CONTROL UNIT

SPECIFICATION

FUNCTIONAL

Attenuator Module UPC2-L-ATT	
Frequency	950-2150 MHz
Insertion Loss at min. Attenuation	4.0 dB
Attenuation Range	20 dB in 0.2 dB steps
Attenuation Response	±0.7 dB/950-2150 MHz
Input Return Loss	15 dB minimum
Output Return Loss	15 dB minimum
Input/Output Impedance	50 ohms
Input Third Order Intercept Point	+28 dBm minimum
Power Output (P1dB)	+18 dBm minimum
Failsafe Path Insertion Loss	3.5 dB maximum
DC By-pass	
Power	24 VDC/2 amp maximum (no fuse)
Reference	5/10 MHz, 1 dB typical insertion loss 2 dB maximum
UPC Chassis Features	
Summary Alarm	Contact closure for attenuator channel status and summary fault
Remote Interface	10/100 Base-T Ethernet and RS485/RS422
Beacon Level Voltage Input	0 to +10VDC or 0 to -10VDC (no Zero crossing)

OPTIONS

Available Attenuator Options (total of ten channels maximum)

950-2150 MHz, 50 ohms - See specifications above

Option

1-1-L	One	UPC2-L-ATT
1-2-L	Two	UPC2-L-ATT
1-3-L	Four	UPC2-L-ATT
1-4-L	Four	UPC2-L-ATT
1-5-L	Five	UPC2-L-ATT
1-6-L	Six	UPC2-L-ATT
1-7-L	Seven	UPC2-L-ATT
1-8-L	Eight	UPC2-L-ATT
1-9-L	Nine	UPC2-L-ATT
1-10-L	Ten	UPC2-L-ATT



The Narda-MITEQ UPC2 Uplink Power Control Unit is a rack-mountable unit, designed for geo-stationary satellite communication systems. It adjusts the strength of uplink signals to compensate for varying weather conditions.

The UPC2 can be set up completely from the front panel or over a remote bus via a host computer. All monitor and control functions are accessible at the front panel as well as over the remote bus. The UPC2 protocol set is backward-compatible with the well-known Narda-MITEQ UPC-A and UPC-L products.

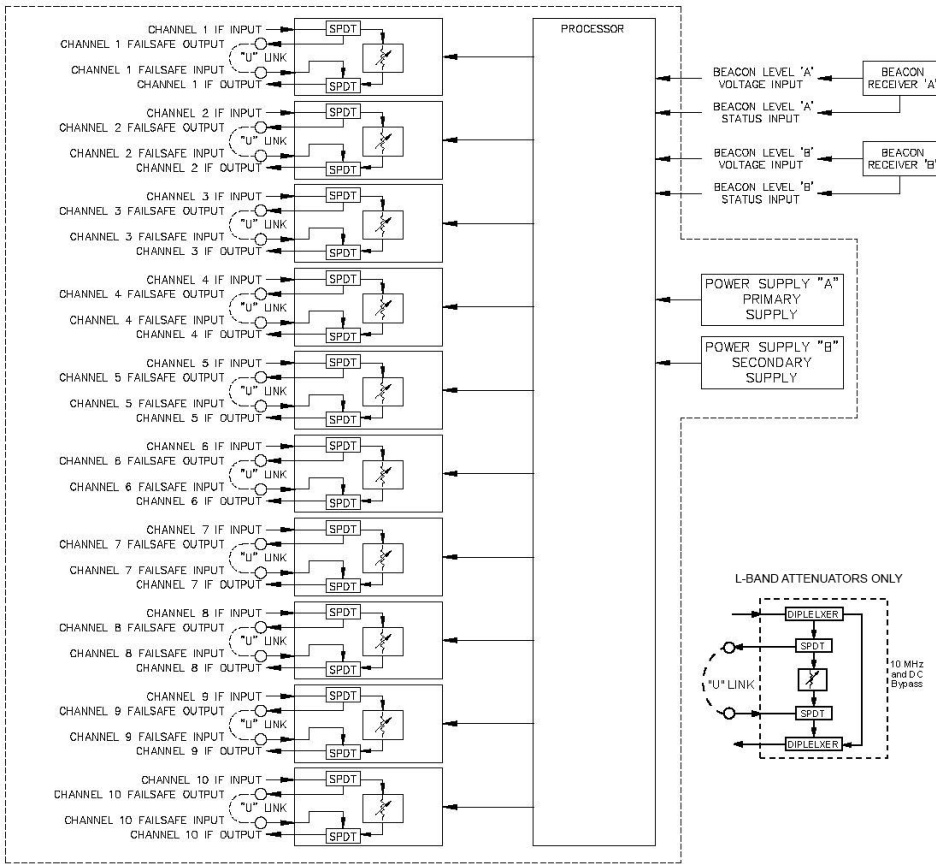
A customer-supplied Beacon Receiver provides the UPC2 with a DC voltage proportional to the downlink signal strength.

The UPC2 can control up to ten L-band uplink attenuator channels resident in the UPC2, and can adjust up to 20 dB of power correction for each channel. In the event of an internal attenuator fault or power loss to the UPC2, the signal will be switched to a failsafe path. This failsafe path is routed through the rear panel via a "U" link connection. This connection allows the user to install a fixed attenuator in each path.

The UPC2 is equipped with fully redundant power supplies.

PRIMARY POWER REQUIREMENTS	
Voltage	100-240 VAC
Frequency	47-63 Hz
Power Consumption	40 W Typical
PHYSICAL	
Weight	25 pounds nominal
Overall Dimensions	19" [482.6mm] x 5.25" [133.35mm] panel height x 20" [508mm] max.
Connectors Signal Path	
L-Band I/O	SMA female
Beacon Level Voltage Inputs	BNC female or DE-9P
Receiver Fault Inputs	DE-9P
Remote Interface	
RS485/RS422	DE-9S
Ethernet	RJ-45
ENVIRONMENTAL	
Operating	Non-Operating
Ambient Temperature 0°C to 50°C	Ambient Temperature -50°C to +70°C
Relative Humidity Up to 95% at 30°C	Relative Humidity Up to 95% at 40°C
Atmospheric Pressure Up to 10,000 feet	Atmospheric Pressure Up to 40,000 feet
	Shock and Vibration Normal Handling by Commercial Carriers

FUNCTION BLOCK DIAGRAM



UPLINK POWER CONTROL UNIT

KEY FEATURES

- > L-Band 950-2150 MHz attenuators with fail safe signal paths
- > Up to ten uplink channels
- > DC and 10 MHz by-pass for L Band
- > 10/100 Base-T Ethernet Interface
 - > HTTP
 - > Telnet
 - > SNMPv1
- > RS485/RS422 selectable remote interface
- > Field expandable attenuator channels
- > Color Touch Screen simplifies setup and operation

OPTIONS

- > Number of attenuator channels (up to ten)

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Narda-MITEQ is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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