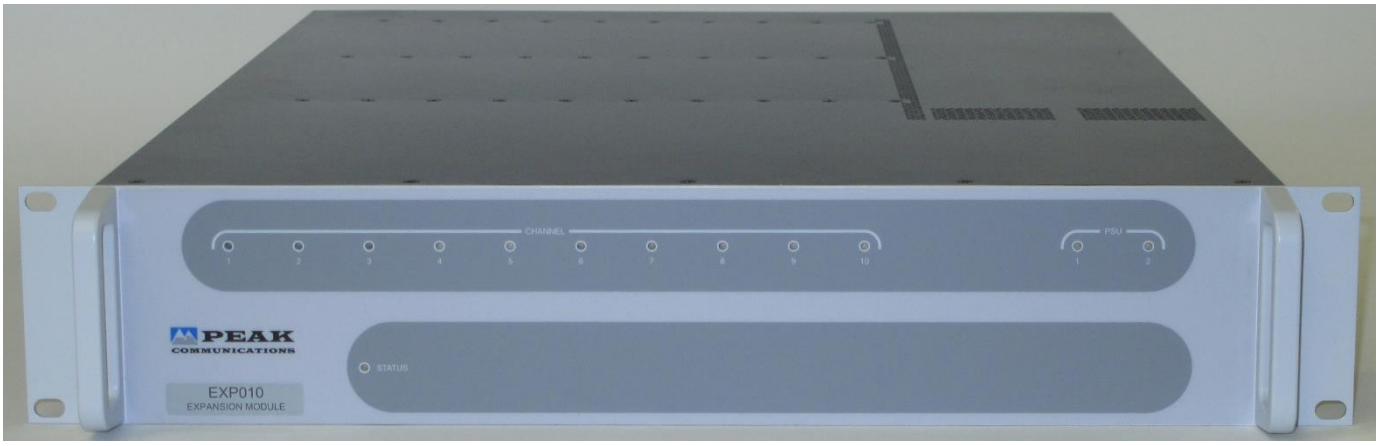
EXP010

10-Channel Expansion Unit for use with the UPC7000 Automatic Up-Link Power Control Unit



The **EXP010** is an expansion unit for the UPC7000series of automatic UpLink power controllers. It can house up to 10 **MPC001** attenuation channels, each of which are modular, 'hot-swappable' and can be inserted/ replaced in the **EXP010** unit from the rear without the need to remove power or disturb the other channels in any way.

The **MPC001** adjustable attenuator modules are positioned in the UpLink chain in either the IF (70MHz ±18MHz or 140MHz ±36MHz) or the L-Band (950-2150MHz) signal path. Each module houses a single adjustable IF or L-Band attenuator channel and can be fitted with fail-safe switching option. The modules are controlled by the **UPC7000** unit via an interface cable (supplied).

The **EXP010** chassis is mains powered with dual (redundant), modular, hot-swappable power supplies, as standard.

Peak Features

- Flexible; modular, 'hot-swappable', expandable solution
- Integral multi-channel UpLink power control facility with optional fail-safe 'Bypass' mode
- Full alarm monitoring
- Redundant power supplies with dual mains input

EXP010 chassis – Typical Specification

Number of channels 1 to 10 (each MPC001 denotes a single channel)

MPC001 - RF Performance

UpLink signal type	L-Band (950-2150MHz), SMA (f), 50Ohm
Option 3;	IF 70±18MHz/ 140±36MHz, SMA (f), 50Ohm
Option 3b;	F-Type (f), 75Ω
Option 3c;	BNC (f), 75Ω
DC & 10MHz pass (Option 4)	Allows DC & 10MHz signals on the L-Band input to be passed through to the output
Output 1dB GCP	+8dBm (TOIP +18dBm)
Option 15[*3];	+22dBm (TOIP +32dBm)
Return loss[*4]	14dB nominal (input and output)
Attenuation control	0-30dB, stepped 0.1dB
Insertion loss[*3,4]	1dB nom. (L-Band), at min attenuation
Gain stability	±0.5dB from 0 to 40^{0}C ±0.1dB per week (constant temp.)
Gain flatness[*4]	±0.5dB 950-2150MHz full band (±0.2dB IF option 3) ±0.2dB across any 36MHz in band
Bypass (Option 5)	Fail-safe switching to external user selectable pad
Bypass connection	SMA (f), 50Ohm (2 connections per channel)
Bypass insertion loss	1dB (plus external pad fixed attenuation value)

[*3] Note; increases insertion losses to 4dB nom.
[*4] Note; options 4 & 5 may modify the typical performance (for details please contact the factory).

Other

Mechanical

Width	19", standard rack mount
Height	2U (3.5")
Depth	534mm (21"), plus connectors
Construction	Stainless steel chassis
Weight	
EXP010	Approx. 4kgs (9lbs)
MPC001	Approx. 0.5kg (1lb)
MPS001	Approx. 0.5kg (1lb)

Environmental

Operating temp	-10^{0}C to +50^{0}C
EMC	EN55022, part B & EN50082-1
Safety	EN60950

MPS001 power supply (modular, dual, redundant)

Note; 2off supplied as standard with the EXP010 unit, spare modules available

Voltage	90-264VAC
Frequency	47-63Hz
Power	100 Watts max. (with 10 channels installed)

Control System

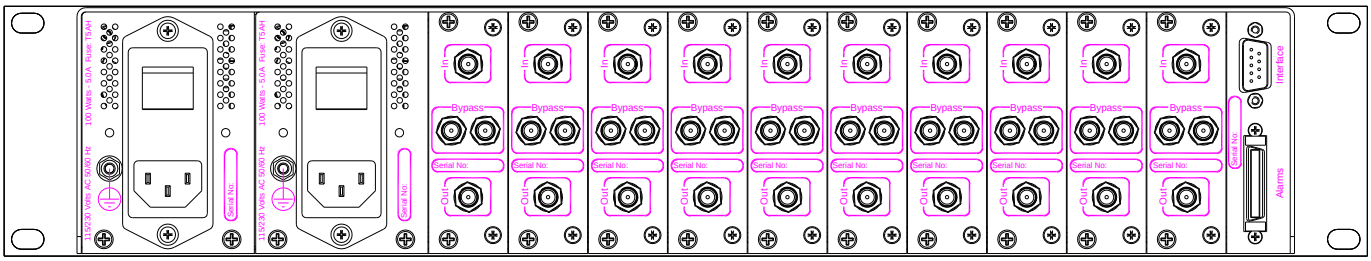
Signal type	Data over CANBUS®
Connection	D-Type (f), 9-way
Alarms	PSU 1 & 2 failure
	Channel alarms (1-10)
Connection	MDR, 36-way

Options

3) 70MHz or 140MHz internal UpLink interface
3b) F-Type, 75Ω internal uplink interface
3c) BNC, 75Ω internal uplink interface
4) DC & 10MHz pass-through for L-Band Uplink channels
5) Fail safe by-pass switching for uplink channels
5b) External fixed attenuator & connection link for fail safe bypass option
15) Higher uplink channel output P1dB GCP to +22dBm nom (TOIP +32dBm)

Notes; the addition of options can modify the typical specification, for details please consult the factory

Rear Panel View *(shown with 10 channels fitted)*



PEAK COMMUNICATIONS

Peak Communications reserves the right to alter the specifications of this equipment without prior notice. EXP010-181218.
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