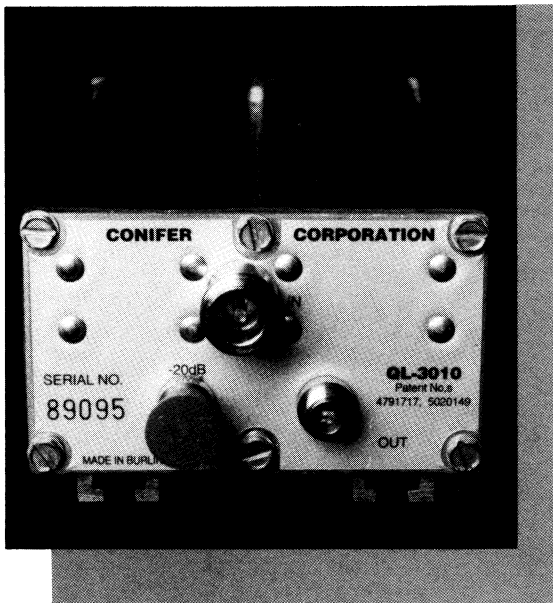


Model QL-3010* QL-3012*

BLOCK DOWN CONVERTERS DUAL BAND/SINGLE INPUT



*Patent No. 4,791,717
*Patent No. 5,020,149

The QL-3010, featuring the latest developments in block conversion technology, is ideally suited for the wireless cable operator who plans on using any or ALL channels in the MDS 1/2 and MMDS/ITFS bands. Unique in design the **QL-3010 features a single common input for all 33 channels and is for use in markets where the transmitters are co-located and co-polarized.**

In response to operator needs for a higher gain model, Conifer now offers the QL-3012 with 28dB of gain.

- 20 & 28dB gain models available
- Fully verified 33 channel dual band capability
- Precise, cost effective SMD (Surface Mount Device) manufacturing technology to insure superior reliability
- MOV lightning & surge protection circuitry
- Patented dual band circuitry with diplexer bar allowing the use of one common input
- Patented interdigital filter for each band eliminating interference and potential overload from all out-of-band signals including VHF/UHF stations, weather and airport radar.
- Ultra low-noise figures through GaAs FET technology
- Quartz-locked synthesized oscillator for unparalleled frequency stability
- Time-saving external aluminum quick mount bracket with stainless steel "L" bolt
- Marine grade aluminum housing with stainless steel fasteners

QL-3010/3012 SPECIFICATIONS

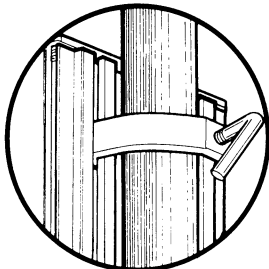
Gain		
QL-3010		21dB
QL-3012		28dB
Noise Figure		4.0dB
Input Frequency ¹		
MDS		2150-2162MHz
MMDS/ITFS Band		2500-2686MHz
Output Frequency ¹		
MDS		116-128MHz
MMDS/ITFS Band		222-408MHz
IF Rejection		>80dB (50-450MHz)
Set Point Accuracy		±15KHz @ 25°C
Frequency Stability	-40°C - -60°C	±30KHz Typical ±50KHz Maximum
Response Flatness		
Per Channel		5dB
Per Band		±1.5dB
Image Rejection		>50dB
RF Input Level		
Minimum (for 45dB S/N)		-60dBm
Maximum (with Single Channel)		
MDS Band		-29dBm
MMDS/ITFS Band		
QL-3010		-19dBm
QL-3012		+22dBm
Maximum (Per Channel with 33 channels present)		
QL-3010		-49dBm
QL-3012		-52dBm
RF Output Level		
Maximum (with Single Channel) ²		
MDS Band		
QL-3010		+41dBmV
QL-3012		+48dBmV
MMDS/ITFS Band		
QL-3010		+51dBmV
QL-3012		+55dBmV
Maximum (Per Channel with 33 Channels Present) ²		
QL-3010		+21dBmV
QL3012		+25dBmV
Two Tone Intermod		
MMDS/ITFS Band		
QL-3010		-50dBc ³
QL-3012		-45dBc ³
IP ₃		
MMDS/ITFS Band		
QL-3010		+21.0dBm
QL-3012		+25.5dBm
Spurious Outputs		
@RF Input		
In Band		-60dBmV
Out of Band		-55dBm
@IF Output		
In Band	QL-3010	-60dBmV
	QL-3012	-45dBmV
Out of Band	QL-3010	-25dBm
	QL-3012	-35dBm
Power Supply		
Voltage Required		+15 to 24Vdc
Current Required	QL-3010	170mA
	QL-3012	210mA
Input Impedance		50 OHMS
Output Impedance		75 OHMS
Input Connector		"N" Type
Output Connector		"F" Type
Test Jack ("F" Type)		-20dB
Dimensions (Inches)		8 × 3 ³ / ₈ × 2 ³ / ₈
Weight (Lbs.)		1.8

¹Different input/output frequencies may be available.

²While maintaining -50dBc IMD

³Tested with Two Tones @ -25dBm.

Specifications based on standard frequencies and subject to change without notice.



Install the QL-3010/3012 in seconds with the one piece QUICK MOUNT BRACKET.

QL-3010 STANDARD CHANNEL CONVERSIONS

INPUT		OUTPUT		
CHANNEL/ GROUP	BANDWIDTH	CHANNEL DESIGNATION	BANDWIDTH	
MDS 1	2150-2156			122-128
MDS 2	2156-2162			116-122
A-1	2500-2506	24	(K)	222-228
B-1	2506-2512	25	(L)	228-234
A-2	2512-2518	26	(M)	234-240
B-2	2518-2524	27	(N)	240-246
A-3	2524-2530	28	(O)	246-252
B-3	2530-2536	29	(P)	252-258
A-4	2536-2542	30	(Q)	258-264
B-4	2542-2548	31	(R)	264-270
C-1	2548-2554	32	(S)	270-276
D-1	2554-2560	33	(T)	276-282
C-2	2560-2566	34	(U)	282-288
D-2	2566-2572	35	(V)	288-294
C-3	2572-2578	36	(W)	294-300
D-3	2578-2584	37	(AA)	300-306
C-4	2584-2590	38	(BB)	306-312
D-4	2590-2596	39	(CC)	312-318
E-1	2596-2602	40	(DD)	318-324
F-1	2602-2608	41	(EE)	324-330
E-2	2608-2614	42	(FF)	330-336
F-2	2614-2620	43	(GG)	336-342
E-3	2620-2626	44	(HH)	342-348
F-3	2626-2632	45	(II)	348-354
E-4	2632-2638	46	(JJ)	354-360
F-4	2638-2644	47	(KK)	360-366
G-1	2644-2650	48	(LL)	366-372
H-1	2650-2656	49	(MM)	372-378
G-2	2656-2662	50	(NN)	378-384
H-2	2662-2668	51	(OO)	384-390
G-3	2668-2674	52	(PP)	390-396
H-3	2674-2680	53	(QQ)	396-402
G-4	2680-2686	54	(RR)	402-408

**INPUT/OUTPUT CHANNEL CONVERSIONS
MAY BE CHANGED TO MEET OPERATOR'S
NEEDS. CONSULT FACTORY FOR DETAILS**

QL-3010/3012

POWER SUPPLY/INSERTER OPTIONS

Model	Type
PS-1301	110V (U.S. PLUG)
PS-2301	220V (U.S. PLUG)

COPYRIGHT 3/1989, 1992 Conifer