

pa0nhc Miniwhip partslist-EN Ver. **20170726**  
PCB **V13** 20170730

		<b>CONRAD OrderN r</b>	
T1	BF998	153029	
T2	BFU590G	Digikey Mouser  eBay- DARIS US GMBH	4-pin SOT223-4 12V 2W 8GHz
D1,2	1N4148	162280	Fast switching diode. Prevent damage to T1.
ZD1	12V 500mW.	180181	Limits Uds of T1 to a safe value in case of high supply voltage.
ZD2	1N5929B	130507 0	15V 2W
1x	BNC PCB 90 degr.	730387	"BNC" (on antenn PCB).
2x	BNC Chassis type	740632	"RX / ANT" (in splitter).
	2.1mm Jack for connecting +12V power.	733946	"PWR" connector in splitter.
F1	PCB Fuse holder	539208 0	5x20mm
	Fuse 0,2A 5x20mm	534480	A fuse prevents damage to L2,3,4 and PCBs.
	Cabinet for combibox	541621	Hammond 1590a
L1	10uH RM5	447209	Resonates in the circuit at abt. 29MHz
L2,3,4	100uH RM5	433396	Low Ri.

C1,8,9 , 10	100n RM5	531855	Ceramic (or film).
C2,3,4 , 7	100n RM5 <b>FILM</b>	459932	<b>Film</b> capacitor. NO ceramic Cs here !
C5,6	100uF 16V RM2.5	443906	Uc5 = abt. 11.2V .
			<b>Alle resistors : Metalfilm 0.25W, 2.3x6.5mm (bend it to RM10).</b>
R1	4M7		
R2	1M		
R10	1k		
R4	150 Ohm		Ur4 should be 3.0V .
R5	82 Ohm		
R6	1k2		
R7	2k2		
R3,8	100 Ohm or small ferrite bead 1mm hole		Ferrite beads in stead of resistor can lower the self noise level of the system.
R9	2x220 + 2x180 Ohm 1/4W in parallel		Low inductance . Ur9 = abt. 6V .
R11	68k		Ug2 should be 2.0V higher than Ur4 (Ug1).
R12	47k		
R13			<b>Wire bridge.</b> IF T2 should oscillate at certain coax cable lengths, exchange wire bridge R13 for a resistor 47 Ohms.
	Ferrite- rings for suppressio n of mantle currents and noises.	534480 or <b>500683</b>	Ui = 5000 - 10000. Epcos has useable rings too in several dimensions.

