

Component list**APT159A_APT159B**

Elettronika Code	Description	Qty	Page 1/2
00664	LM35DT THERMAL SENSOR	1	
01041	1nF 50V CERAMIC CAPACITOR	2	
02029	UG 909 CONNECTOR FOR RG 58 CABLE	1	(APT159B)
02228	N FEMALE CONNECTOR	1	
02458	EIA 7/8" INNER	1	(APT159B)
02502	SMA SOCKET FOR RG58 CABLE	1	
02695	DB9 CONNECTOR FOR IU008059 CABLE	3	
02699	FEMALE 10WIRE CONNECTOR	5	
02700	FEMALE 16WIRE CONNECTOR	2	
02830	10A GREEN PLUG	1	
02876	5 POLES 16A ILME AC SOCKET	1	
02877	5 POLES 16A ILME SOCKET PANEL MOUNTING	1	
05508	MECHANICAL DETAIL	2	
05570	MECHANICAL DETAIL	4	(APT159B)
05578B	20U RACK WITH EIA 7/8" OUTPUT CONNECTOR	1	(APT159B)
05553B	5-6U HANDLE KIT	2	
06673A	UHF ATV BANDPASS FILTER	1	(APT159B)
07524A	SWITCH	1	
07527	25A MAGNETO-THERMIC SWITCH	1	
07541	10A FUSE-HOLDER PANEL MOUNTING	2	
07586	FAN	3	
07596	GRID	3	
07925	PVC PROTECTION	1	
07990	FLAT CABLE	2.00	
08503	RG 303 50Ω CABLE	0.90	
08504	RG 58 50Ω CABLE	1.00	
08515C	1/2" CABLE	1.00	(APT159B)
09419	PN419/A PRINTED CIRCUIT BOARD	1	
CON0178	CON0178R4 REAR PANEL	1	
CON0246	CON0246R0 MECHANICAL DETAIL	1	
CON0247	CON0247R1 MECHANICAL DETAIL	1	
CSS5011	1.5m RG 58 CABLE FOR N - N MALE CONNECTOR	1	(APT159B)
CSS5998	1/2" CABLE FOR 7/16" - EIA 7/8" CONNECTOR	1	
C0256	16 WAY FLAT CABLE	0.50	(APT159B)
C0258	DB9 MALE - DB9 MALE PIN-TO-PIN CABLE	2	(APT159B)
DET0335	DET0335R1 MECHANICAL DETAIL	1	(APT159B)
DET0434	DET0434R2 MECHANICAL DETAIL	1	(APT159B)
DET0483	DET0483R0 MECHANICAL DETAIL	2	(APT159B)
DET0516	DET0516R0 MECHANICAL DETAIL	1	
DET0565	DET0565R0 MECHANICAL DETAIL	1	(APT159B)
DET0575	DET0575R1 MECHANICAL DETAIL	3	
DET1022	DET1022R0 MECHANICAL DETAIL	1	
DET1060	DET1060R0 MECHANICAL DETAIL	1	
DET1358R0P	DET1358R0 MECHANICAL DETAIL	2	(APT159B)
E0012	SP500-27 DE2 SWITCHING POWER SUPPLY	3	

☒ APT159A☒ APT159B

Electronika Code	Description	Qty	Page 2/2
FUS1A	1A FUSE	1	
FUS5A	5A FUSE	1	
MTF0083AR0	LDMOS UHF AMPLIFIER MODULE	1	
PAN0074	PAN0074R2 FRONT PANEL	1	
PAN0080	PAN0080R0 1U FRONT PANEL	5	(APT159B)
PAN0081	PAN0081R0 2U FRONT PANEL	2	(APT159B)
PAN0082	PAN0082R0 3U FRONT PANEL	2	(APT159B)
SCH0223AR1	CONTROL BOARD	1	
SCH0265AR0	MAINS DISTRIBUTION BOARD	1	
SCH0288AR1	POWER SUPPLY INTERFACE BOARD	1	
V0760	BLACK PLASTIC TAP	1	
V0761	BLACK PLASTIC TAP	1	
V0970	EQUIPOTENTIAL TERMIAL BLOCK	3	
Z0021	MECHANICAL DETAIL	2	
Z0081	MECHANICAL DETAIL	1	

Component list**APT148A**

Elettronika Code	Description	Qty
00664	LM35DT THERMAL SENSOR	1
01041	1nF 50V CERAMIC CAPACITOR	2
02228	N FEMALE CONNECTOR	1
02503	90° SMA SOCKET FOR RG 58 CABLE	1
02695	DB9 CONNECTOR FOR IU008059 CABLE	3
02699	FEMALE 10WIRE CONNECTOR	9
02700	FEMALE 16WIRE CONNECTOR	2
02830	10A GREEN PLUG	1
02876	5 POLES 16A ILME AC SOCKET	1
02877	5 POLES 16A ILME SOCKET PANEL MOUNTING	1
03017	MBR3045PT DIODE	3
05553B	5-6U HANDLE KIT	2
07524A	SWITCH	1
07925	PVC PROTECTION	1
07527	25A MAGNETO-THERMIC SWITCH	1
07541	10A FUSE-HOLDER PANEL MOUNTING	2
07596	FAN GRID	3
07990	FLAT CABLE	7.00
08503	RG 303 50W TEFLON CABLE	1.20
09419	PN419/A PRINTED CIRCUIT BOARD	1
C0256	16 WAY FLAT CABLE	0.60
CON0178	CON0178R4 REAR PANEL	1
CON0219	CON0219R5 MECHANICAL DETAIL	1
CON0220	CON0220R5 MECHANICAL DETAIL	1
CON0290	CON0290R0 MECHANICAL DETAIL	1
DET0516	DET0516R0 MECHANICAL DETAIL	1
DET0575	DET0575R1 MECHANICAL DETAIL	6
DET0994	DET0994R2 MECHANICAL DETAIL	1
DET0996	DET0996R0 MECHANICAL DETAIL	1
DET1185	DET1185R1 MECHANICAL DETAIL	2
DET1348R0P	DET1348R0 MECHANICAL DETAIL	1
E0012	SP500-27 DE2 SWITCHING POWER SUPPLY	6
FUS1A	1A FUSE	1
FUS5A	5A FUSE	1
MTF0077AR0	LDMOS UHF AMPLIFIER MODULE	1
PAN0074	PAN0074AR2 FRONT PANEL	1
PN0998A	PN0998AR1 POWER ADDER PCB	2
R0012	18mm DIAMETER WHEEL	8
SCH0223AR1	CONTROL BOARD AND DISPLAY	1
SCH0259AR0	AMPLIFIER INTERFACE BOARD	1
SCH0265AR0	MAINS DISTRIBUTION BOARD	1
SCH0288AR1	POWER SUPPLY INTERFACE BOARD	1
VEN0004	24V PAPST FAN	3
V0760	BLACK PLASTIC TAP	1
V0962	TERMINAL BLOCK	3

☒ APT148A☐ APT148C☐ APT148C/DIG

Component list**APT148C_APT148C/DIG**

Electronika Code	Description	Qty	
02029	UG909 CONNECTOR FOR RG 58 CABLE	1	
02458	EIA 7/8" INNER	1	(APT148C)
02502	SMA SOCKET FOR RG58	1	
02791	DB9 MALE SOCKET PANEL MOUNTING	2	
02871	DB9 SHELL	2	
06659	UHF ATV BANDPASS FILTER	1	(APT148C)
06676	UHF DTV BANDPASS FILTER	1	(APT148C/DIG)
07595	FAN	1	
07595A	6uF CAPACITOR	1	
07595B	GRID	1	
07596	GRID	1	
07970	PVC PROTECTION	2	
08504	RG 58 50Ω CABLE	1.00	
APT148A	AUTV/1000LD LDMOS UHF TV AMPLIFIER	1	
CAV1000	H05 CABLE	3	
CAV1002	CABLE	3	
CMS6006	1m 1/2" CABLE FOR 7/16" MALE CONNECTOR	1	(APT148C)
CMS6009	1.5m 1/2" CABLE FOR 7/16" MALE CONNECTOR	1	(APT148C)
CSS5011	1.5m RG 58 CABLE FOR N - N MALE CONNECTOR	1	
CSS5998	1/2" CABLE FOR 7/16" - EIA 7/8" CONNECTOR	1	
DET0609	DET0609R0 MECHANICAL DETAIL	2	
DET1069	DET1069R0 MECHANICAL DETAIL	2	
DET1183	DET1183R3 MECHANICAL DETAIL	4	
DET1201	DET1201R1 MECHANICAL DETAIL	2	
DET1202	DET1202R0 MECHANICAL DETAIL	2	
DET1203	DET1203R0 MECHANICAL DETAIL	2	
DET1204	DET1204R0 MECHANICAL DETAIL	2	
DET1288	DET1288R0 MECHANICAL DETAIL	2	
DET1308	DET1308R0 MECHANICAL DETAIL	2	
DET0335	DET0335R1 MECHANICAL DETAIL	1	
DET1342R2P	DET1342R2 MECHANICAL DETAIL	4	
DET1364R0P	DET1364R0 MECHANICAL DETAIL	1	(APT148C/DIG)
DET1365R0P	DET1365R0 MECHANICAL DETAIL	1	(APT148C)
DET1366R0P	DET1366R0 MECHANICAL DETAIL	1	(APT148C)
DET1367R0P	DET1367R0 MECHANICAL DETAIL	2	
DET1432R0P	DET1432R0 MECHANICAL DETAIL	1	(APT148C)
PAN0080	PAN0080R0 1U FRONT PANEL	2	(APT148C) 1 (APT148C/DIG)
PAN0081	PAN0081R0 2U FRONT PANEL	1	(APT148C) 2 (APT148C/DIG)
PAN0082	PAN0082R0 3U FRONT PANEL	2	
RAK0003U20	20U RACK	1	
Z0114	MECHANICAL DETAIL	1	

☐ APT148A ☒ APT148C ☒ APT148C/DIG

Component list**APT144C_APT144CM**

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Elettronika Code	Description	Qty	
00664	LM35DT THERMAL SENSOR	1	
01041	1nF 50V CERAMIC CAPACITOR	2	
02228	N FEMALE CONNECTOR	1	(APT144CM)
02502	SMA SOCKET FOR RG58	1	
02695	DB9 CONNECTOR FOR IU008059 CABLE	3	
02699	FEMALE 10WIRE CONNECTOR	9	
02700	FEMALE 16WIRE CONNECTOR	1	
02830	10A GREEN PLUG	1	
02876	5 POLES 16A ILME AC SOCKET	1	(APT144CM)
02877	5 POLES 16A ILME SOCKET PANEL MOUNTING	1	(APT144CM)
02893	3 WAY MALE EXTRACTABLE TERMINAL BLOCK	4	(APT144CM)
02894	3 WAY FEMALE EXTRACTABLE TERMINAL BLOCK	4	(APT144CM)
05064	FERRITE	8	(APT144CM)
05553B	5-6U HANDLE KIT	2	
07515C	4x16A AUTOMATIC SWITCH	1	(APT144C)
07524A	SWITCH	1	
07541	10A FUSE-HOLDER PANEL MOUNTING	3	
07605C	FAN	3	
07605D	1.5uF 400V CAPACITOR	3	
07605F	GRID FAN	6	
07925	PVC PROTECTION	1	
08503	RG 303 50W TEFLON CABLE	1.20	
09419	PN419/A PRINTED CIRCUIT BOARD	1	
CON0245	CON0245R1 MECHANICAL DETAIL	1	
CON0249	CON0249R0 MECHANICAL DETAIL	1	
CON0276	CON0276R3 MECHANICAL DETAIL	1	
CON0277	CON0277R3 MECHANICAL DETAIL	1	
CON0280	CON0280R2 MECHANICAL DETAIL	1	
C0205	MULTIPOLES WIRE	3.00	
DET0516	DET0516R0 MECHANICAL DETAIL	1	
DET0575	DET0575R1 MECHANICAL DETAIL	8	
DET0772	DET0772R0 MECHANICAL DETAIL	2	
DET0798	DET0798R0 MECHANICAL DETAIL	6	
DET0996	DET0996R0 MECHANICAL DETAIL	1	
DET1022	DET1022R0 MECHANICAL DETAIL	1	
DET1054I	DET1054R1 MECHANICAL DETAIL	2	
DET1185	DET1185R1 MECHANICAL DETAIL	2	
E0012	SP-500-27 DE2 SWITCHING POWER SUPPLY	8	
FUS1A	1A FUSE	1	
FUS3A	3.15A FUSE	1	
FUS5A	5A FUSE	1	
MTF0070CR0	LDMOS UHF AMPLIFIER MODULE	1	
PAN0074	PAN0074AR2 FRONT PANEL	1	
PN1114A	PN1114AR1 PRINTED CIRCUIT BOARD	1	
R0012	18mm DIAMETER WHEEL	8	

☒ APT144C ☒ APT144CM ☐ APT144DM ☐ APT144DM/DIG

Electronika Code	Description	Qty	Page 2/2
SCH0223AR1	CONTROL BOARD AND DISPLAY	1	
SCH0265AR0	MAINS DISTRIBUTION BOARD	1	
SCH0288AR1	POWER SUPPLY INTERFACE BOARD	1	
V0760	BLACK PLASTIC TAP	1	(APT144CM)
V0962	TERMINAL BLOCK	3	(APT144CM)
Z0021	MECHANICAL DETAIL	2	
Z0081	MECHANICAL DETAIL	1	
Z0673	COVER	1	

Component list**APT144DM_APT144DM/DIG**

Elettronika Code	Description	Qty
02029	UG909 CONNECTOR FOR RG 58 CABLE	1
02410	7/16" CONNECTOR FOR 1/2" CABLE	1
02450	EIA 7/8" CONNECTOR FOR 1/2" CABLE	1
02458	EIA 7/8" INNER	1
02502	SMA SOCKET FOR RG58 CABLE	1
02791	DB9 MALE SOCKET PANEL MOUNTING	5 (APT144DM) 2 (APT144DM/DIG)
02871	DB9 SHELL	5 (APT144DM) 2 (APT144DM/DIG)
06674	UHF ATV BANDPASS FILTER	1 (APT144DM)
06676A	UHF DTV BANDPASS FILTER	1 (APT144DM/DIG)
07595	FAN	1
07595A	6uF CAPACITOR	1
07595B	GRID	1
07596	GRID	1
08504	RG 58 50Ω CABLE	1.00
08515C	1/2" CABLE	1.00
APT144CM	AUTV/1500LD LDMOS UHF TV AMPLIFIER	1
CMS6006	1m 1/2" CABLE FOR 7/16" MALE CONNECTOR	1
CSS5011	1.5m RG 58 CABLE FOR N - N MALE CONNECTOR	1
DET0434	DET0434R2 MECHANICAL DETAIL	1
DET0536	DET0536R3 MECHANICAL DETAIL	2 (APT144DM)
DET0564	DET0564R0 MECHANICAL DETAIL	1
DET0565	DET0565R0 MECHANICAL DETAIL	1
DET1028	DET1028R0 MECHANICAL DETAIL	2 (APT144DM/DIG)
DET1051	DET1051R0 MECHANICAL DETAIL	2 (APT144DM)
DET1069	DET1069R0 MECHANICAL DETAIL	2 (APT144DM)
PAN0080	PAN0080R0 1U FRONT PANEL	1 (APT144DM)
PAN0081	PAN0081R0 2U FRONT PANEL	1 (APT144DM) 2 (APT144DM/DIG)
PAN0082	PAN0082R0 3U FRONT PANEL	3 (APT144DM) 2 (APT144DM/DIG)
R0159	20U RACK	1
Z0114	MECHANICAL DETAIL	1
Z0500	MECHANICAL DETAIL	8

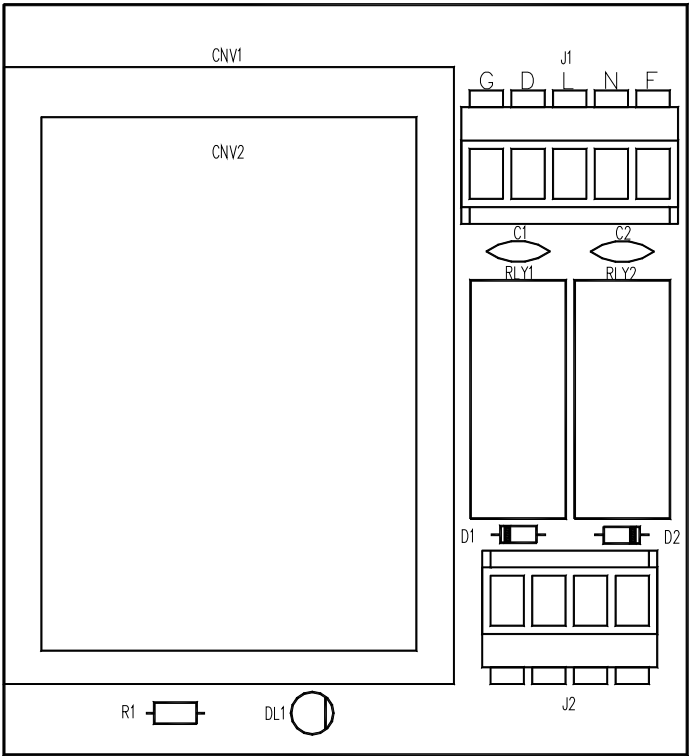
☐ APT144C ☐ APT144CM ☒ APT144DM ☒ APT144DM/DIG

SCH0223ARI COMPONENT LIST

Part Name/Number	Description	Qty.	Comps.	Page 1/2
BATT BH001RB 3093 _90	03093 03090 BATTERY HOLDER	1	BATT1	
CC 100nF-S 01065C	01065C Y5V 1206 CAPACITOR	46	C2, C7-10, C12, C16, C19, C21-27, C29, C31, C33, C37-40, C44-46, C49, C58-61, C63, C65, C66-69, C74, C76, C78-81, C83-84, C87, C90	
CC 15pF-S 01088	01088 SMD 1206 CAPACITOR	4	C13-15, C17	
CC 1nF-S 01096	01096 SMD 1206 CAPACITOR	7	C3-6, C50-51, C53	
CC 1uF100V-S 01760A	01760A 1206 50V CAPACITOR	11	C1, C18, C28, C36, C43, C54, C62, C73, C77, C88-89	
CC 47pF-S 01100	01100 SMD 1206 CAPACITOR	2	C42, C52	
CE 100uF25V-S 01793B	01793B ELET. SMD CAPACITOR	2	C11, C47	
CE 10uF16V-S	01626B TANT. ELET. SMD CAP.	2	C56-57	
CE 10uF35V-S 01778A	01778A ELET. SMD CAPACITOR	2	C20, C32	
CE 1uF35V-S 01613A	01613A TANT. ELET. SMD CAP.	5	C70-72, C75, C82	
CE 220uF50V LOW ESR	01799A ELET. SMD CAPACITOR	4	C55, C64, C85-86	
CE 22uF16V-S	01780A ELET. SMD CAPACITOR	4	C34-35, C41, C48	
CE 47uF35V-S 01790A	01790A ELET. SMD CAPACITOR	1	C30	
D 1N4148-S 03002	03002 SMD DIODE	7	D1-2, D5-9	
D 50WQ06FN	03019A SMD DIODE SCHOT. 5.5A	1	D23	
D BAS85-S	03024 SMD DIODE SCHOTTKY	2	D14-15	
D BAT54S	03199 SMD SCHOTTKY DIODE	19	D3-4, D10-13, D16-22, D24-29	
DIS MGLS12864T	03083A 128x64 DOT	1	DIS1	
DL KA-3528SGC 03057	03057 GREEN SMD LED DIODE	7	DL2, DL5-10	
DL LEDG5 03060	03060 GREEN LED DIODE 5mm	1	DL1	
DL LEDR5 03061	03061 RED LED DIODE 5mm	1	DL4	
DL LEDY5 03054B	03054B YELLOW LED DIODE 5mm	1	DL3	
IC 24LC64 04815	04815 SMD INTEG CIRCUIT	1	IC17	
IC 78M12 4307B	04307B SMD VOLTAGE REGUL.	1	IC8	
IC CD4051BM-S	04615 SMD INTEG CIRCUIT	3	IC7, IC14, IC23	
IC LM2596S-5.0	04580 SMD INTEG CIRCUIT	1	IC19	
IC LM358M-S 04660	04660 SMD INTEG CIRCUIT	1	IC3	
IC LM393-S 04639	04639 SMD INTEG CIRCUIT	1	IC2	
IC LMC6482-S	04632 SMD INTEG CIRCUIT	1	IC24	
IC LMC6484-S	04634 SMD INTEG CIRCUIT	7	IC1, IC4, IC6, IC9, IC13, IC18, IC25	
IC M41T56 04611	04611 SMD INTEG CIRCUIT	1	IC20	
IC MAX232-S 04804B	04804B SMD INTEG CIRCUIT	1	IC21	
IC MAX3080-S 04770	04770 SMD INTEG CIRCUIT	1	IC22	
IC MAX942CSA-S	04572 SMD INTEG CIRCUIT	1	IC10	
IC MB90F543PF	04596 SMD INTEG CIRCUIT	1	IC11	
IC MPC100-450DI-TO	04608 INTEG CIRCUIT	1	IC16	
IC TC7662BCOA 04758A	04758A SMD INTEG CIRCUIT	1	IC5	
IC ULN2003A 4870	04870 SMD INTEG CIRCUIT	2	IC12, IC15	
IND 2u2H-S 05020A	05020A INDUCTOR	1	L1	
IND MS85 10uH-S	04948 2.7A INDUCTOR	1	L2	

Part Name/Number	Description	Qty.	Comps.	Page 2/2
IND T100uH-1.8A 4958	04958 TOROIDAL-STORAGE	1	L3	
J CON HD515V/05-4PVE	02881+02882 PANDUIT PCB CON.	1	J14	
J DB9_F-0° LT	02794 PCB CONNECTOR DB9	1	J13	
JFC-10P 02697-02699	02697+02699 PCB CONNECTOR	8	J1-2, J6, J8-12	
JFC-16P 02701-02700	02701+02700 PCB CONNECTOR	1	J3	
J PAN2 02739	02739 PCB CONNECTOR	2	J5, J7	
J PAN2 02739-40-41	02739+02740+02741 PCB CONNEC.	1	J15	
J PAN8 02716	02716 PCB CONNECTOR	1	J4	
JU JUMP2 02739-02742	02739+02742 PAN2 MALE	1	JP3	
JU JUMP3 02707-02742	02707+02742 PAN3 MALE	2	JP1-2	
R 100K-1%-S 00065B	00065B RES 1/4W 1% SMD 1206	16	R33-34, R62-63, R78-79, R94-101, R106-107	
R 100R-1%-S 00029D	00029D RES 1/4W 1% SMD 1206	12	R24, R47, R58, R71, R75, R81, R83, R89, R103-105, R113	
R 10K-1%-S 00053B	00053B RES 1/4W 1% SMD 1206	24	R7, R10, R12, R14-16, R22, R25, R27, R30, R36, R38, R51, R64, R84-85, R87-88, R92, R93, R108-111	
R 10R-S 00017A	00017A RES 1/4W 5% SMD 1206	1	R68	
R 1206 N. M.	N. M. RES 1/4W 5% SMD 1206	1	R91	
R 1K0-1%-S 00041B	00041B RES 1/4W 1% SMD 1206	8	R17, R54, R59-60, R76-77, R86, R90	
R 22K-1%-S 00057B	00057B RES 1/4W 1% SMD 1206	11	R9, R21, R26, R28-29, R37, R45, R48-50, R69	
R 2K2-1%-S 00045B	00045B RES 1/4W 1% SMD 1206	3	R52, R55, R61	
R 330K-1%-S 00071D	00071D RES 1/4W 1% SMD 1206	1	R66	
R 330K-S 00071A	00071A RES 1/4W 5% SMD 1206	1	R65	
R 470K-S 00073A	00073A RES 1/4W 5% SMD 1206	11	R8, R23, R40, R42, R46, R57, R70, R74, R80, R102, R112	
R 470R-1%-S 00037B	00037B RES 1/4W 1% SMD 1206	6	R11, R13, R39, R53, R56, R67	
R 4K7-1%-S 00049B	00049B RES 1/4W 1% SMD 1206	3	R18, R31, R43	
R 68K-1%-S 00063B	00063B RES 1/4W 1% SMD 1206	4	R19-20, R32, R44	
R 820R-S 00040A	00040A RES 1/4W 5% SMD 1206	7	R35, R72-73, R82, R114-116	
R 8K2-1%-S 00052B	00052B RES 1/4W 1% SMD 1206	1	R41	
RL 30.22.24 07569	07569 RELE	3	RLY1-3	
RV 1M-3266X	00815 VARIABLE RESISTOR	6	R1-6	
SW SWITCH-8DIP	07530A PCB DIP SWITCH SMD	1	SW1	
T 06086 N 7630 7632	7630 7632 KTI06086 2 WAY KEY	4	T1-4	
TR BC848 03457	03457 NPN SMD TRANSISTOR	2	TR1-2	
TR BC856 03455	03455 PNP SMD TRANSISTOR	2	TR3-4	
XTAL 32.768k-S 05146	05146 QUARTZ	1	XTAL2	
XTAL 4MHz-S 05101A	05101A QUARTZ	1	XTAL1	

SCH0265AR0 Component layout

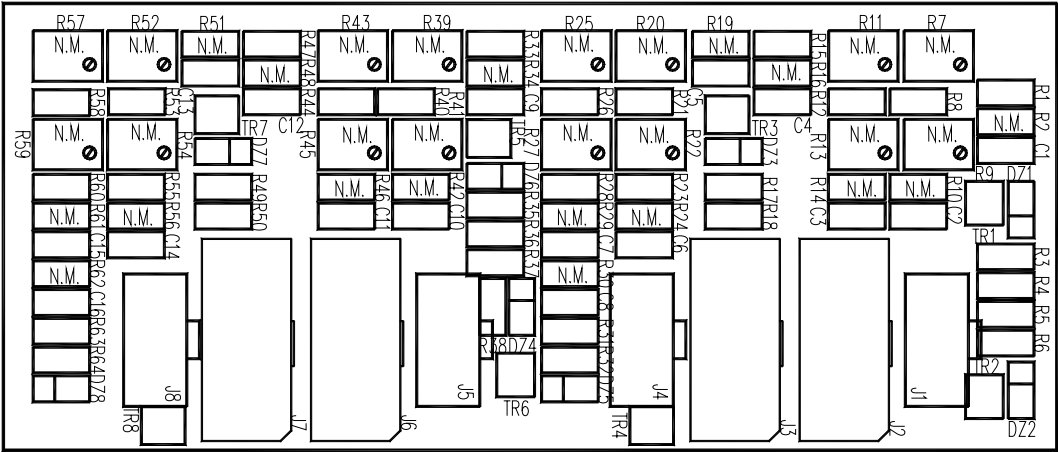


SCH0265AR0 COMPONENT LIST

Part Name/Number	Description	Qty.	Comps.
CC 2nF2 2kV 01045A	01045A CERAMIC CAPACITOR	2	C1-2
CNV AC-DC ATC-12S	E0037 AC DC CONVERTER	1	CNV1
D 1N4148 03001	03001 DIODE	2	D1-2
DL LEDG3 03053	03053 GREEN LED DIODE 3mm	1	DL1
J CONHD515V/05-4PVE	02881+02882 PANDUIT PCB CON.	1	J2
J CONHD515V/05-5PVE	02895+02896 PANDUIT PCB CON.	1	J1
R 2K7 0046	0046 RES 1/4W 5%	1	R1
RL 40.31.24	7567C RELE	2	RLY1-2

☒ APT159A	☒ APT159B	☒ APT148A	☒ APT148C	☒ APT148C/DIG
☒ APT144C	☒ APT144CM	☒ APT144DM	☒ APT144DM/DIG	

SCH0288AR1 Component layout



SCH0288AR1 COMPONENT LIST

Part Name/Number	Description	Qty.	Comps.
CC 1nF-S 01096	01096 SMD 1206 CAPACITOR	16	C1-16
DZ 5V1-S 03128	03128 SMD ZENER DIODE	8	DZ1-8
JFC-10P 02697-02699	02697+02699 PCB CONNECTOR	4	J2-3, J6-7
JFC-10P PCB FEMALE	02706 PCB FEM. CONNECTOR	4	J1, J4-5, J8
R 0R0-S 00001	00001 RES 1/4W 5% SMD 1206	16	R1, R8, R12, R15, R21, R23, R26, R28, R33, R40, R44, R47, R53, R55, R58, R60
R 100K-1%-S 00065B	00065B RES 1/4W 1% SMD 1206	8	R3, R6, R17, R32, R35, R38, R49, R64
R 1206 N. M.	N. M. RES 1/4W 5% SMD 1206	16	R2, R10, R14, R16, R19, R24, R29-30, R34, R42, R46, R48, R51, R56, R61-62
R 8K2-1%-S 00052B	00052B RES 1/4W 1% SMD 1206	8	R4-5, R18, R31, R36-37, R50, R63
RV 3266W N. M.	N. M. VARIABLE RESISTOR	16	R7, R9, R11, R13, R20, R22, R25, R27, R39, R41, R43, R45, R52, R54, R57, R59
TR BC847 03456	03456 NPN SMD TRANSISTOR	8	TR1-8

☒ APT159A	☒ APT159B	☒ APT148A	☒ APT148C	☒ APT148C/DIG
☒ APT144C	☒ APT144CM	☒ APT144DM	☒ APT144DM/DIG	

DESCRIPTION

The MTF0083A is the RF Amplifier module of the AUTV/500LD based on LDMOS technology. The RF Amplifier module is composed by three broadband amplifier boards (SCH0192A) coupled together by means of Wilkinson combiners, driven by means another amplifier board. The module also includes the cooling heatsink and a small Interface board (SCH0259A) which forwards power supply to the two stages, groups the power and temperature into a single connector, more easily managed inside the transmitter. The driver stage of the amplifier module is provided with a Gate control to inhibit the output power.

TECHNICAL CHARACTERISTICS

Frequency Range	470 - 860MHz
Output Power	500W PEP
Gain	23dB (±2)
Driver Stage Quiescent Current (cold)	4A (2A for each transistor to 32V)
Amplifier Stage Quiescent Current (cold)	2A (1A for each transistor to 32V)
Total Quiescent Current (cold)	10A
RF Input Impedance	50Ω
RF Output Connector / Impedance	7/16" / 50Ω

MTF0083AR0 COMPONENT LIST

Elettronika Code	Description	Qty
00424	250W 50Ω HIGH POWER TERMINATION	3
00029A	100Ω 1206 SMD RESISTOR	1
01041	1nF 50V CERAMIC CAPACITOR	2
01096	1nF MULTITURN CHIP CAPACITOR	3
01400	BYPASSING CAPACITOR	8
02402	7/16" CONNECTOR	1
02512	SMA SOCKET	1
03207	HSMS-2802 DIODE	3
08502	RG 316 50Ω CABLE	1.30
08521	RG 179 75Ω CABLE	0.27
08527	HF-85 ENDIFORM CABLE	0.25
DET0842	DET0842R5 HEAT SINK	1
PN0998A	PN0998AR1 POWER SUPPLY ADDER	1
PN1079A	PN1079AR2 3 WAY INPUT DIVIDER	1
PN1078A	PN1078AR4 OUTPUT COMBINER	1
PN1083A	PN1083AR2 INPUT COUPLER	1
PN1210A	PN1210AR2 DIRECTIONAL COUPLER	1
SCH0192AR0	200W LDMOS UHF AMPLIFIER MODULE	4
SCH0259AR0	AMPLIFIER INTERFACE BOARD	1

☒ APT159A	☒ APT159B	☐ APT148A	☐ APT148C	☐ APT148C/DIG
☐ APT144C	☐ APT144CM	☐ APT144DM	☐ APT144DM/DIG	

DESCRIPTION

The MTF0077A is the RF Amplifier module of the AUTV/1000LD based on LDMOS technology. The RF Amplifier module is composed by six broadband amplifier boards (SCH0192A) coupled together by means of Wilkinson combiners, driven by means another amplifier board. The module also includes the cooling heatsink and a small Interface board (SCH0259A) which forwards power supply to the two stages, groups the power and temperature into a single connector, more easily managed inside the transmitter. The driver stage of the amplifier module is provided with a Gate control to inhibit the output power.

TECHNICAL CHARACTERISTICS

Frequency Range	470 - 860MHz
Output Power	1000W PEP
Gain	23dB (±2)
Driver Stage Quiescent Current (cold)	4A (2A for each transistor to 32V)
Amplifier Stage Quiescent Current (cold)	2A (1A for each transistor to 32V)
Total Quiescent Current (cold)	10A
RF Input Impedance	50Ω
RF Output Connector / Impedance	7/16" / 50Ω

MTF0083AR0 COMPONENT LIST

Elettronika Code	Description	Qty
00029D	100Ω 1% 1206 SMD RESISTOR	3
00035A	330Ω 1% 1206 SMD RESISTOR	2
00424	250W 50Ω HIGH POWER TERMINATION	6
00441	350W 50Ω HIGH POWER TERMINATION	1
01041D	1nF 2% 1206 SMD CERAMIC CAPACITOR	3
02402	7/16" FEMALE CONNECTOR	1
02512	SMA SOCKET	1
03207	HSMS-2802 DIODE	3
08502	RG 316 50Ω CABLE	1.00
08527	HF-85 ENDIFORM CABLE	0.43
PN1066A	PN1066AR3 3 WAY DIVIDER	1
PN1077A	PN1077AR2 6 WAY COMBINER	1
PN1080A	PN1080AR2 3 WAY DIVIDER	1
PN1083A	PN1083AR2 INPUT COUPLER	1
PN1091A	PN1091AR3 DIRECTIONAL OUTPUT COUPLER	1
PN1118A	PN1118AR1 2 WAY DIVIDER	1
PN1120A	PN1120AR2 2 WAY COMBINER	1
PN1194A	PN1194AR1 GATE INTERFACE	1
SCH0192AR0	LDMOS UHF AMPLIFIER MODULE	7

☐ APT159A	☐ APT159B	☒ APT148A	☒ APT148C	☒ APT148C/DIG
☐ APT144C	☐ APT144CM	☐ APT144DM	☐ APT144DM/DIG	

DESCRIPTION

The MTF0070C is the RF Amplifier module of the AUTV/1500LD based on LDMOS technology. The RF Amplifier module is composed by eight broadband amplifier boards (SCH0192A) coupled together by means of Wilkinson combiners, driven by means another amplifier board. The module also includes the cooling heatsink and a small Interface board (SCH0221A) which forwards power supply to the two stages, groups the power and temperature into a single connector, more easily managed inside the transmitter. The driver stage of the amplifier module is provided with a Gate control to inhibit the output power.

TECHNICAL CHARACTERISTICS

Frequency Range	470 - 860MHz
Output Power	1300W
Gain	23dB (±2)
Driver Stage Quiescent Current (cold)	4A (2A for each transistor to 32V)
Amplifier Stage Quiescent Current (cold)	2A (1A for each transistor to 32V)
RF Input Impedance	50Ω
RF Output Connector / Impedance	7/16" Female / 50Ω

MTF0070CR0 COMPONENT LIST

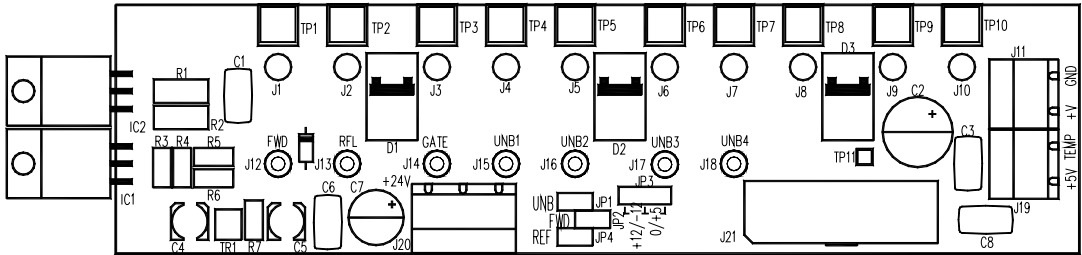
Elettronika Code	Description	Qty
00001	0Ω 1206 SMD RESISTOR	2
00221B	75Ω 1206 SMD RESISTOR	2
01041D	1nF 1206 SMD CERAMIC CAPACITOR	2
01400	BYPASSING CAPACITOR	13
01408	BYPASSING CAPACITOR	2
02402	7/16" FEMALE CONNECTOR	1
02512	SMA SOCKET PANEL MOUNTING	1
03017	MBR3045PT DIODE	4
03207	HSMS2802 DIODE	2
08502	RG 316 50Ω CABLE	3.00
08527	HF-85 ENDIFORM CABLE	0.20
PN0998A	PN0998AR1 BIAS ADDER PCB	2
PN1091A	PN1091AR3 UHF DIRECTIONAL COUPLER PCB	1
SCH0192AR0	200W LDMOS UHF AMPLIFIER MODULE	9
SCH0221AR0	AMPLIFIER INTERFACE BOARD	1
SCH0248AR0	8 INPUTS WILKINSON PCB	1
SCH0249AR0	4 WAY WILKINSON PCB	1
SCH0250AR0	4 WAY WILKINSON PCB	1
SCH0251AR0	2 WAY WILKINSON PCB	1
SCH0252AR0	UHF INPUT COUPLER	1

☐ APT159A	☐ APT159B	☐ APT148A	☐ APT148C	☐ APT148C/DIG
☒ APT144C	☒ APT144CM	☒ APT144DM	☒ APT144DM/DIG	

SCH0192AR0 COMPONENT LIST

Elettronika Code	Description	Manufacturer, Mfr. Code	Qty	Comps.
00045A	2K2 1206 5% 1/4W RESISTOR	PHICOMP, RC1206JR072K2L	4	R1-4
00042A	1K2 1206 1% 1/4W RESISTOR	PHICOMP, RC1206FR071K2L	4	R5-6, R9-10
00800	50K 3.8" SQUARE TRIMMER	BOURNS, 3296W-1-503	2	R7-8
00056B	18K 1206 5% 1/4W RESISTOR	PHICOMP, RC1206JR0718KL	2	R11-12
00075A	680K 1206 5% 1/4W RESISTOR	PHICOMP, RC1206JR07680KL	1	R13
00001	0R 1206 RESISTOR	PHICOMP, RC1206JR070RL	1	R14
00432	50 OHM 60W TERMINATION	DICONEX, 17-0185	2	R25-26
00049A	4K7 1206 1% 1/4W RESISTOR	PHICOMP, RC1206FR074K7L	2	R17-18
00012A	3R9 1206 5% 1/4W RESISTOR	PHICOMP, RC1206JR073R9L	4	R19-22
00396	1K0 2512 5% 1W RESISTOR	TYCO, 35201K0JT	2	R23-24
01807B	470uF 50V ELECTROLITIC CAPACITOR	ADIMPEX, CL514750	3	C1-3
01795	100uF PTH 50V ELET. VERT. CAPACIT.	ADIMPEX, CL211050	2	C4-5
01145	1nF 50V PORCELAIN CAPACITOR	ATC, ATC100B102JT50XT	6	C6-7, C25-28
01065H	100nF 2220 1kV CERAMIC CAPACITOR	SYFER, 2220J1K00104KXT	4	C8-9
01135	100pF 500V PORCELAIN CAPACITOR	ATC, ATC100B101KT500XT	8	C10-11
01065G	100nF 1210 250V CAPACITOR	SYFER, 1210J2500104KXT	9	C12-14, C21-24
01613A	1uF SMD 35V TANTALUM CAPACITOR	NIC COMPONENTS CORP., NTC-T105M35TRB	2	C15-16
01626A	10uF SMD 16V TANT. CAPACITOR	KEMET, KEMT491C106K016AT	2	C19-20
01123	20pF 500V PORCELAIN CAPACITOR	ATC, ATC100B200JT500XT	4	C29-32
01104	1.3pF 500V PORCELAIN CAPACITOR	ATC, ATC100B1R3DT500XT	2	C33-34
01143	470pF 200V PORCELAIN CAPACITOR	ATC, ATC100B471KW200X	4	C35-38
01108	4.7pF 500V PORCELAIN CAPACITOR	ATC, ATC100B4R7DT500XT	2	C57-58
01117	10pF 500V PORCELAIN CAPACITOR	ATC, ATC100B100JT500XT	2	C55-56
01104B	3.6pF 500V PORCELAIN CAPACITOR	ATC, ATC100B3R6DT500XT	2	C43-44
01119A	13pF 500V PORCELAIN CAPACITOR	ATC, ATC100B130KT500XT	2	C49-50
01113	8.2pF 500V PORCELAIN CAPACITOR	ATC, ATC100B8R2JT500XT	4	C51-54
01160	0.3pF 500V PORCELAIN CAPACITOR	ATC, ATC100B0R3CT500XT	1	C60
01485	VARIABLE CAPACITOR 1-5pF	JOHANSON, 9702-1	2	C41-42
04034	LDMOS TRANSISTOR BLF861	PHILIPS, BLF861/A	2	T1-2
00661	NTC THERMISTOR 100K	VISHAY, 238164063104	2	NTC1-2
04583	IC SPDT ANALOG SWITCH	MAXIM, DG419DY-E3	2	IC1-2
03135	DIODE 15V ZENER	FAIRCHILD, MMSZ5245B	2	DZ1-2
03137	DIODE 6.8V ZENER	DIOTEC, GSEZMM6.8/D2	2	DZ3-4
03056	LED RED SMD	KINGBRIGHT, KA3528EC	2	DL1-2
07684	SILVERED WIRE 1.2MM	ELETTRONIKA, 07684	0.25	L1-2
DET0643K	200W LDMOS PALLET	ELETTRONIKA, DET0643K	1	
01111	6.8pF 500V PORCELAIN CAPACITOR	ATC, ATC100B6R8KT500XT	4	C45-48
V0774	SPACER 3X10 F/F	ELEKTROZUBEHOR, DD10H305010	1	
08491	PRE-FOLDED CABLE	EZ FORM CABLE, EZ9025	2	B1-2
08492	PRE-FOLDED CABLE	EZ FORM CABLE, EZ3425 SILVER	2	B3-4
01109	5.6pF 500V PORCELAIN CAPACITOR	ATC, ATC100B5R6DT500XT	2	C39-40
01077A	1uF PTH 100V POLYESTER CAPACITOR	ARCOTRONICS, R82EC4100DQ70J2		C61-62

SCH0259AR0 Component layout

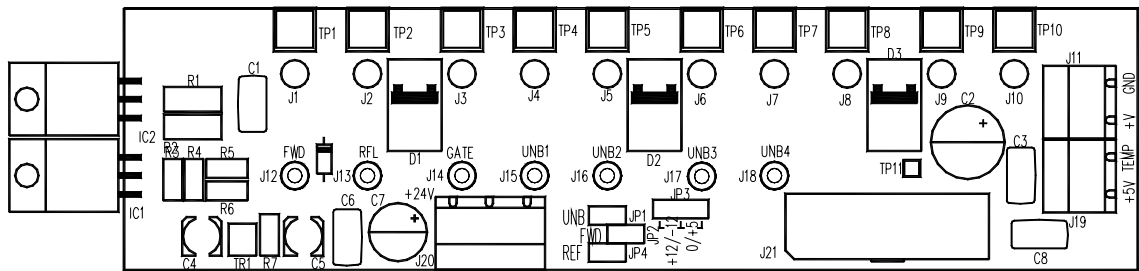


SCH0259AR0 COMPONENT LIST

Part Name/Number	Description	Qty.	Comps.
CC 100nFAVX 01065A	01065A CERAMIC CAPACITOR	4	C1, C3, C6, C8
CE 100uF100V	01795B ELET. CAPACITOR	1	C2
CE 100uF50V 01795	01795 ELET. CAPACITOR	1	C7
CE 10uF35V-S 01778A	01778A ELET. SMD CAPACITOR	2	C4-5
D 1N4007 03009	03009 DIODE	1	D4
D 6CWQ10FN	03026 SMD DIODE SCHOTTKY	3	D1-3
IC LM317HV	04340A INTEG CIRCUIT	2	IC1-2
J FC-16P 02701-02700	02701+02700 PCB CONNECTOR	1	J21
J SCREWCONN2 02853	02853 PCB SCREW CONNECTOR	2	J11, J19
J SCREWCONN3 02860	02860 PCB SCREW CONNECTOR	1	J20
J TESTP1.3mm 07913	07913 TEST POINT	17	J1-10, J12-18
JU JUMP2 02739-02742	02739+02742 PAN2 MALE	3	JP1-2, JP4
JU JUMP3 02707-02742	02707+02742 PAN3 MALE	1	JP3
R 0R33-1W-S	00380 RES 1W 5% SMD 2512	2	R1-2
R 100K-S 00065A	00065A RES 1/4W 5% SMD 1206	1	R7
R 220R-S 00033A	00033A RES 1/4W 5% SMD 1206	1	R4
R 22K-S 00057A	00057A RES 1/4W 5% SMD 1206	1	R5
R 270R-S 00034A	00034A RES 1/4W5% SMD 1206	1	R3
R 4K7-S 00049A	00049A RES 1/4W 5% SMD 1206	1	R6
TR BC856 03455	03455 PNP SMD TRANSISTOR	1	TR1

☒ APT159A	☒ APT159B	☒ APT148A	☒ APT148C	☒ APT148C/DIG
☐ APT144C	☐ APT144CM	☐ APT144DM	☐ APT144DM/DIG	

SCH0221AR0 Component layout



SCH0221AR0 COMPONENT LIST

Part Name/Number	Description	Qty.	Comps.
CC 100nFAVX 01065A	01065A CERAMIC CAPACITOR	4	C1, C3, C6, C8
CE 100uF100V	01795B ELET. CAPACITOR	1	C2
CE 100uF50V 01795	01795 ELET. CAPACITOR	1	C7
CE 10uF35V-S 01778A	01778A ELET. SMD CAPACITOR	2	C4-5
D 1N4007 03009	03009 DIODE	1	D4
D 6CWQ10FN	03026 2x3.5A SMD DIODE SCHOT.	3	D1-3
IC LM317HV	04340A INTEG CIRCUIT	2	IC1-2
JFC-16P 02701-02700	02701+02700 PCB CONNECTOR	1	J21
J SCREWCONN2 02853	02853 PCB SCREW CONNECTOR	2	J11, J19
J SCREWCONN3 02860	02860 PCB SCREW CONNECTOR	1	J20
J TESTP1.3mm 07913	07913 TEST POINT	17	J1-10, J12-18
JU JUMP2 02739-02742	02739+02742 PAN2 MALE	3	JP1-2, JP4
JU JUMP3 02707-02742	02707+02742 PAN3 MALE	1	JP3
R 0R33-1W-S	00380 RES 1W 5% SMD 2512	2	R1-2
R 100K-S 00065A	00065A RES 1/4W 5% SMD 1206	1	R7
R 220R-S 00033A	00033A RES 1/4W 5% SMD 1206	1	R4
R 22K-S 00057A	00057A RES 1/4W 5% SMD 1206	1	R5
R 270R-S 00034A	00034A RES 1/4W 5% SMD 1206	1	R3
R 4K7-S 00049A	00049A RES 1/4W 5% SMD 1206	1	R6
TR BC856 03455	03455 PNP SMD TRANSISTOR	1	TR1

☐ APT159A	☐ APT159B	☐ APT148A	☐ APT148C	☐ APT148C/DIG
☒ APT144C	☒ APT144CM	☒ APT144DM	☒ APT144DM/DIG	