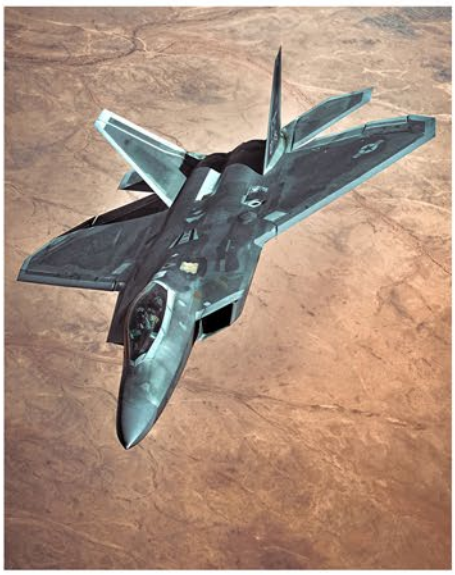
ERZIA

PRODUCT GUIDE 2022

Microwave and Millimeter Wave Devices and Subsystems

AMPLIFIERS | SUSPENDED SUBSTRATE FILTERS | SATCOM CONVERTERS | INTEGRATED ASSEMBLIES

WHEN IT GETS REAL, THEY'LL BE GLAD YOU PUT YOUR FAITH IN ERZIA



LOW NOISE AMPLIFIERS (LNAs)

Wideband

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-0010-0050-20-5	0.1-0.5	20	3	25
ERZ-LNA-0010-0600-18-5.5	0.1-6	20	5.5	27
ERZ-LNA-0002-0600-30-2	0.02-6	30	2	20
ERZ-LNA-0002-0600-27-5.5	0.02-6	27	5.5	25
ERZ-LNA-0005-1000-30-5.5	0.05-10	31	5	31
ERZ-LNA-0600-1700-20-2	6-17	20	2	17
ERZ-LNA-0050-1800-14-4	0.5-18	14	4	15
ERZ-LNA-0050-1800-18-4	0.5-18	18	4	20
ERZ-LNA-0050-1800-14-3.5	0.5-18	14	3.5	20
ERZ-LNA-0050-1800-23-8	0.5-18	24	5	17
ERZ-LNA-0050-1800-15-3	0.5-18	15	3.5	15
ERZ-LNA-0200-1800-30-2	2-18	30	2	18
ERZ-LNA-0200-1800-23-2.5	2-18	23	2.5	15
ERZ-LNA-0200-1800-18-4	2-18	20	3	22
ERZ-LNA-0200-1800-17-4	2-18	17	4	23
ERZ-LNA-0200-1800-18-5.5	2-18	15	3	19
ERZ-LNA-0550-1800-40-4	5.5-18	45	4	9
ERZ-LNA-0865-2265-30-3	8.65-22.65	30	3	14
ERZ-LNA-0100-2700-45-4	1-27	45	4	17
ERZ-LNA-1000-2700-30-4	10-27.5	30	4	22
ERZ-LNA-1250-3000-25-2.5	12.5-30	25	2.5	14
ERZ-LNA-2000-3000-17-2.5	20-30	17	2.5	7
ERZ-LNA-1800-3200-21-3	18-32	21	3	11
ERZ-LNA-0200-3300-30-4	2-33	30	4	16
ERZ-LNA-0100-3800-12-4	1-38	12	4	10
ERZ-LNA-0100-4000-45-5	1-40	45	5	18
ERZ-LNA-0100-4000-30-5	1-40	30	5	16
ERZ-LNA-1600-4000-28-6	16-40	28	6	22
ERZ-LNA-1800-4000-23-12	18-40	24	5	14
ERZ-LNA-1800-4000-15-4	18-40	15	4	18
ERZ-LNA-1800-4200-24-6	18-42	24	6	9
ERZ-LNA-0200-4500-15-4	2-45	15	4	10
ERZ-LNA-0200-5000-22-6	2-50	22	5	10

L-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-0007-0110-28-2	0.07-1.1	28	2	17
ERZ-LNA-0125-0175-27-2	1.25-1.75	27	2	15
ERZ-LNA-0100-0200-10-7	1-2	10	5.5	18
ERZ-LNA-0100-0200-20-1.5	1-2	20	1.5	20
ERZ-LNA-0070-0300-20-0.7	0.7-3	22	0.7	20
ERZ-LNA-0100-0310-30-2	1-3.1	30	1.6	19

S-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-0270-0310-30-0.5	2.7-3.1	30	0.5	15

C-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-0340-0470-23-2	3.4-4.7	23	2	12
ERZ-LNA-0340-0470-13-2	3.4-4.7	13	2	19
ERZ-LNA-0690-0800-30-2.5	6.9-8	30	2.5	20
ERZ-LNA-0300-0930-30-2	3-9.3	30	2	19

X-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-0850-0960-30-2.5	8.5-9.6	30	2.5	20
ERZ-LNA-0840-1020-25-1.5	8.4-10.2	25	1.5	11
ERZ-LNA-1000-1100-30-2.5	10-11	30	2.5	20
ERZ-LNA-0600-1200-35-3	6-12	35	2	20
ERZ-LNA-0600-1200-33-3.5	6-12	33	3.5	20
ERZ-LNA-0600-1200-31-2.5	6-12	31	2.5	21
ERZ-LNA-0600-1200-28-1.5	6-12	28	1.5	28
ERZ-LNA-0800-1220-26-2	8-12.2	26	2	21
ERZ-LNA-0700-1400-16-2	7-14	16	2	10

Ku-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-1000-1600-15-2.5	10-16	15	2.5	10
ERZ-LNA-1250-1700-33-3	12.5-17	33	3	14
ERZ-LNA-1250-1780-30-3	12.5-17.8	30	3	11

K-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-1700-2400-25-2.5	17-24	25	2.5	14
ERZ-LNA-2100-2700-25-2	21-27	25	2	14
ERZ-LNA-2550-2700-45-1.8	25.5-27	45	2	12

Ka-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-1770-2200-70-2-W	17.7-22	70	2	10
ERZ-LNA-1770-2200-70-2	17.7-22	70	2	10
ERZ-LNA-1770-2200-40-1.5	17.7-22	39	1.5	10
ERZ-LNA-2600-4000-30-2.5-W	26-40	30	2.5	11
ERZ-LNA-2600-4000-50-2.5	26-40	50	2.5	14
ERZ-LNA-2600-4000-30-2.5	26-40	30	2.5	11
ERZ-LNA-3000-4000-20-2.5	30-40	20	2.5	10
ERZ-LNA-2500-4300-33-2	25-43	33	2	0

Q-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-4250-4550-30-4.5	42.5-45.5	30	4.5	19

V-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-4720-5140-15-3.5	47.2-50	15	3.5	1.5
ERZ-LNA-4720-5140-15-4	47.2-50	11	3.5	12

W-band

Part Number	Frequency (GHz)	Gain (dB)	Noise Figure (dB)	Pout (dBm)
ERZ-LNA-9300-9500-20-4	93-95	20	4	1
ERZ-LNA-7500-11000-20-4	75-110	20	4	1

HIGH POWER AMPLIFIERS (HPAs)

Wideband

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-0003-0050-28	0.03-0.5	28	34
ERZ-HPA-0010-0400-25-E	0.1-4	25	30
ERZ-HPA-0010-0400-25	0.1-4	25	20
ERZ-HPA-0175-0625-43	1.75-6.25	43	43
ERZ-HPA-0200-0800-36	2-8	36	43
ERZ-HPA-0000-1200-26	0-16	27	32
ERZ-HPA-0100-1800-21	1-18	21	14
ERZ-HPA-0200-1800-30-E	2-18	30	40
ERZ-HPA-0200-1800-30	2-18	30	33
ERZ-HPA-0200-1800-30-DB9	2-18	30	33
ERZ-HPA-0600-1800-40-P	6-18	40	28
ERZ-HPA-0600-1800-40-E	6-18	40	46
ERZ-HPA-0600-1800-40	6-18	40	45
ERZ-HPA-0200-2000-44	2-20	43	40
ERZ-HPA-0200-2000-37	2-20	37	36
ERZ-HPA-0010-2300-27	0.1-23	27	28
ERZ-HPA-0600-2650-40-RM	6-26.5	43	43
ERZ-HPA-1600-3300-24-E	16-33	24	34
ERZ-HPA-1600-3300-24	16-33	24	17
ERZ-HPA-2000-3300-20	20-33	20	22
ERZ-HPA-2300-3700-27	23-37	27	21
ERZ-HPA-2300-3700-25	23-37	24	20
ERZ-HPA-1900-3800-21	19-38	21	20
ERZ-HPA-0050-4000-8	0.5-40	16	15
ERZ-HPA-0050-4000-12	0.5-40	16	28
ERZ-HPA-2000-4000-24	20-40	24	20
ERZ-HPA-2400-4000-22	24-40	22	30
ERZ-HPA-2200-4300-32	22-43	32	35
ERZ-HPA-1700-4300-22-E	17-43	22	45
ERZ-HPA-1700-4300-22	17-43	22	25
ERZ-HPA-2000-4500-24	20-45	24	20

L-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-0050-0200-25	0.5-2	28	27

S-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-0280-0330-40	2.8-3.3	40	38
ERZ-HPA-0200-0400-43	2-4	43	40
ERZ-HPA-0200-0400-40	2-4	40	32
ERZ-HPA-0200-0400-30	2-4	30	35
ERZ-HPA-0200-0400-24	2-4	24	23

C-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-0480-0490-47	4.8-4.9	47	27
ERZ-HPA-0440-0500-40	4.4-5	40	37
ERZ-HPA-0490-0525-43	4.9-5.25	43	45
ERZ-HPA-0520-0540-44	5.2-5.4	46	52
ERZ-HPA-0570-0590-42	5.7-5.9	42	40
ERZ-HPA-0500-0600-25	5-6	28	24
ERZ-HPA-0640-0720-42	6.4-7.2	42	46

X-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-0790-0840-46	7.9-8.4	46	44
ERZ-HPA-0790-0840-37-E	7.9-8.4	37	36
ERZ-HPA-0790-0850-37	7.9-8.5	37	40
ERZ-HPA-0790-0850-40	7.9-8.5	40	50
ERZ-HPA-0850-0980-55	8.5-9.8	55	38
ERZ-HPA-0600-1000-31	6-10	31	23
ERZ-HPA-0850-1050-49	8.5-10.5	49	43
ERZ-HPA-0800-1100-43	8-11	43	35
ERZ-HPA-0900-1400-34	9-14	34	35

Ku-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-1250-1550-34	12.5-15.5	34	27
ERZ-HPA-1300-1600-37	13-16	37	24
ERZ-HPA-1200-1600-26	12-16	26	23
ERZ-HPA-1200-1800-27	12-19	27	14
ERZ-HPA-1200-1900-29	12-19	29	27
ERZ-HPA-1860-1960-25	18.6-19.6	25	26

K-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-1700-2400-34	17-24	34	22
ERZ-HPA-2400-2450-32	24-24.5	33	35
ERZ-HPA-1500-2700-29-E	15-27	29	34
ERZ-HPA-1500-2700-29	15-27	29	17

Ka-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-2600-2800-22	26-28	22	19
ERZ-HPA-2700-3100-43	27-31	43	51
ERZ-HPA-2700-3100-43-C	27-31	43	51
ERZ-HPA-2900-3100-37-E	29-31	37	38
ERZ-HPA-2900-3100-37	29-31	37	21
ERZ-HPA-3000-3100-46	30-31	46	44
ERZ-HPA-2800-3200-32	28-32	32	20
ERZ-HPA-2800-3300-33	28-33	33	16
ERZ-HPA-2400-3600-27	24-36	27	35
ERZ-HPA-3400-3600-35	34-36	35	35
ERZ-HPA-3400-3600-33	34-36	33	39
ERZ-HPA-3100-3700-33-W	31-37	33	18
ERZ-HPA-3100-3700-33	31-37	33	18
ERZ-HPA-3200-3800-40	32-38	40	49
ERZ-HPA-3200-3800-35	32-38	35	33
ERZ-HPA-3200-3800-25	32-38	25	32
ERZ-HPA-3000-4000-32-E-W	30-40	32	39
ERZ-HPA-3000-4000-32-E	30-40	32	39
ERZ-HPA-3000-4000-32	30-40	32	18
ERZ-HPA-2600-4000-33-A	26-40	33	35
ERZ-HPA-2650-4000-33	26-40	33	35
ERZ-HPA-2600-4000-33	26.5-40	33	36
ERZ-HPA-2700-4200-27	27-42	27	30

Q-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-3300-4500-23	33-45	23	15
ERZ-HPA-4000-4500-28-E	40-45	28	23
ERZ-HPA-4100-4600-32	41-46	32	31
ERZ-HPA-4100-4600-30	41-46	30	28
ERZ-HPA-3300-4700-29	33-47	29	30
ERZ-HPA-3300-4700-24-E	33-47	26	25
ERZ-HPA-3300-4700-24	33-47	24	17

V-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-5000-6600-19	50-66	16	20

W-band

Part Number	Frequency (GHz)	Pout (dBm)	Gain (dB)
ERZ-HPA-7500-8300-27	75-83	27	17
ERZ-HPA-7500-8300-25	75-83	25	17
ERZ-MPA-7500-8300-13	75-83	13	18

SATCOM CONVERTERS

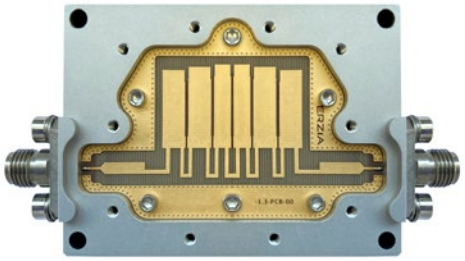
Block Up Converters (BUC)

Part Number	Type	RF Out (GHz)	Psat (dBm)	Plin (dBm)	IF In (MHz)	Gain (dB)
ERZ-BUC-4775-4825-37	V-Band	47,75-48,25	37	34	1250-1750	50
ERZ-BUC-2750-3100-46	Ka-Band	27,5-31	46	43	950-1950	Adjustable 45-75
ERZ-BUC-2750-3100-43	Ka-Band	27,5-31	43	40	950-1950	Adjustable 45-75
ERZ-BUC-0790-0840-43	X-Band	7,9-8.4	43	40	950-1950	Adjustable 45-75

Low Noise Block Downconverter (LNB)

Part Number	Type	RF In (GHz)	NF (dB)	Gain (dB)	IF Out (MHz)	Pout max (dBm)
ERZ-LNB-3750-4250-50-3	Q-Band	37,5-42,5	2.5	Adjustable 45-75	1250-1750	12
ERZ-LNB-1770-2120-75-1.5	Ka-Band	17.7-21.2	1.3	55	950-1950	15

SUSPENDED SUBSTRATE RF/MICROWAVE FILTERS



Part Number	Type	Tech.	Frequency (GHz)	IL typ (dB)	RL typ (dB)
ERZ-BPF-0190-0210-1.8	BPF	SS	1.9-2.1	1.4	18
ERZ-LPF-0000-0250-1.3	LPF	SS	0-2.5	0.4	15
ERZ-BPF-0205-0255-2.2	BPF	SS	2.05-2.55	1.7	15
ERZ-BPF-0350-0380-2.4	BPF	SS	3.5-3.8	2.2	18
ERZ-BPF-0210-0380-1.9	BPF	SS	2.1-3.8	1	15
ERZ-LPF-0000-0380-1.3	LPF	SS	0-3.8	0.3	20
ERZ-HPF-0210-0480-1.3	HPF	SS	2.1-4.8	0.5	15
ERZ-BPF-0530-0610-2.5	BPF	SS	5.3-6.1	2	15
ERZ-BPF-0350-0610-2.1	BPF	SS	3.5-6.1	1.2	18
ERZ-LPF-0000-0610-1.6	LPF	SS	0-6.1	0.3	20
ERZ-HPF-0350-0690-1.7	HPF	SS	3.5-6.9	0.7	15
ERZ-BPF-0920-1000-2.9	BPF	SS	9.2-10	2.5	13
ERZ-BPF-0110-1000-2.0	BPF	LC+SS	1.1-10	0.9	13
ERZ-BPF-0540-1000-3.1	BPF	SS	5.4-10	1.6	10
ERZ-LPF-0000-1000-1.5	LPF	SS	0-10	0.4	13
ERZ-BPF-0900-1100-3.0	BPF	Alumina	9-11	2.1	13
ERZ-HPF-0540-1210-1.4	HPF	SS	5.4-12.1	0.8	15
ERZ-BPF-0110-1750-2.4	BPF	LC+SS	1.1-17.5	1.2	13
ERZ-LPF-0000-1800-2.4	LPF	SS	0-18	0.7	13
ERZ-BPF-0920-1800-3.7	BPF	SS	9.2-18	2	10
ERZ-HPF-0930-1870-1.7	HPF	SS	9.3-18.7	1	15
ERZ-HPF-0110-1900-1.1	HPF	LC	1.1-19	0.5	20
ERZ-HPF-1750-4100-2.0	HPF	SS	17.5-41	1.3	13

Type: BPF: Band Pass Filter
HPF: High Pass Filter
LPF: Low Pass Filter

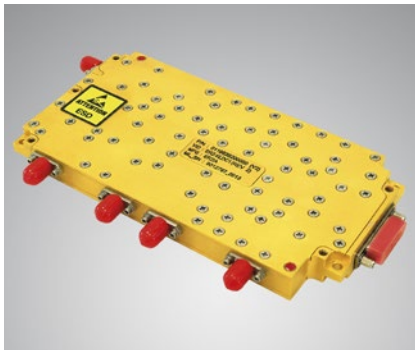
Technology: SS: Suspended Substrate
LC: Lumped elements

EFFICIENT AND DEPENDABLE

INTEGRATED MICROWAVE ASSEMBLIES

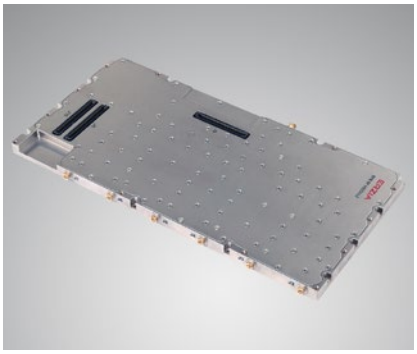
Choose ERZIA for your complex integrated assemblies. Utilizing our industry-leading amplifiers we can optimize your assemblies for the performance, size, and weight characteristics that are critical to your application. We've been designing and delivering these assemblies for quick and easy integration into a variety of systems worldwide, including the critical environments involved in space and defense applications such as Electronic Warfare (EW), Signal Intelligence (SIGINT), Radar, Scientific Instrumentation, and Telecommunications.

Visit our website at www.erzia.com to request price and delivery on your next assembly.



UP/DOWN CONVERTERS

Best in class converters. Narrow to wideband solutions across the whole RF spectrum.



BEAMFORMERS

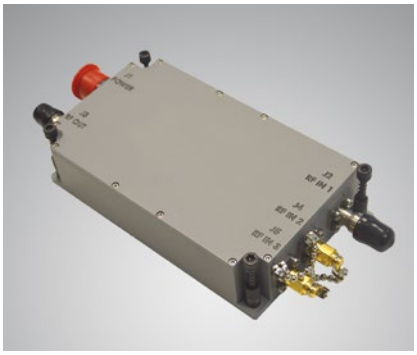
Offering precision phase control of your entire operating bandwidth.

SWITCHING MATRICES

For fast signal distribution in the toughest environments.

RF FRONT ENDS

Compact and rugged modules to handle any signal under demand.

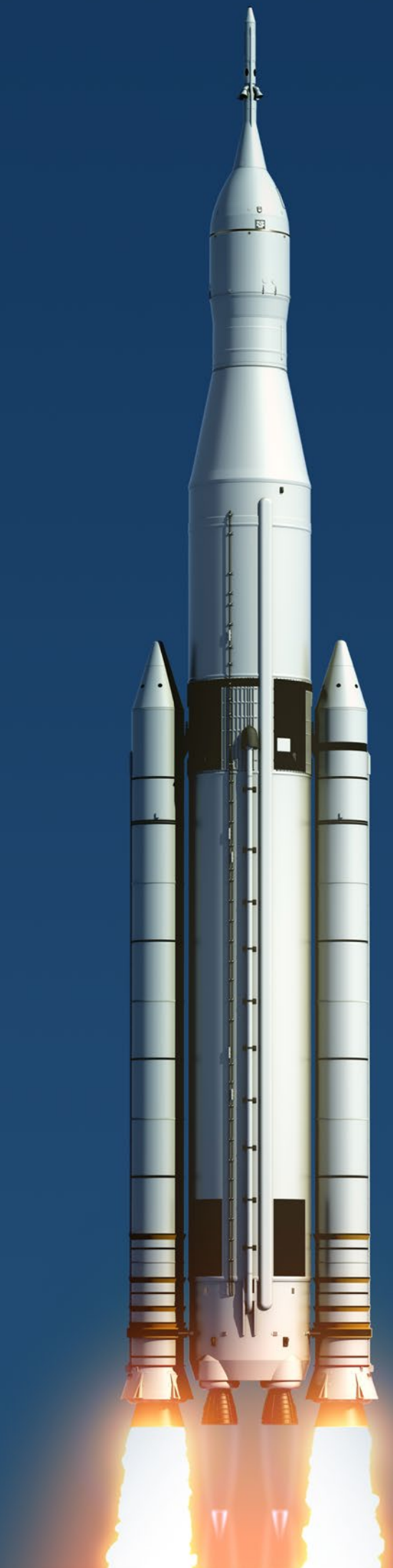


SWITCHED FILTERED BANKS

Wideband and ultra-fast operation through multiple channels.

CUSTOM UNITS

Custom units are supported by field-proven ERZIA modules.



A LEGACY OF SUCCESS **IN SPACE**

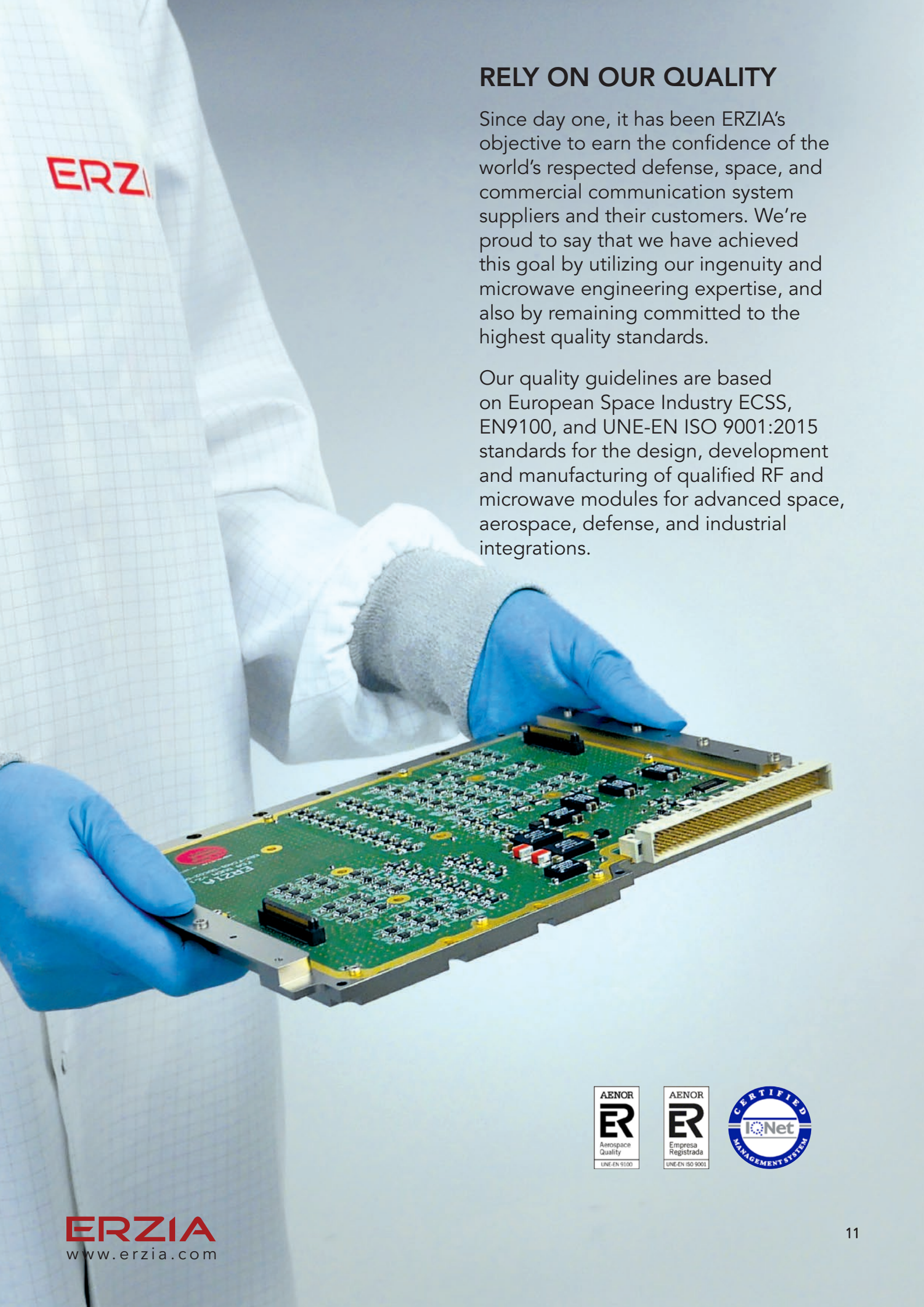
For over 15 years, ERZIA has been trusted to deliver high performance solutions to some of the most challenging space expeditions in the world. As a result, we have developed an impressive space heritage. We are proud to have provided state-of-the art amplifiers, acousto-optic tunable filters (AOTFs), and other unique components that drive the performance of both airborne and ground support equipment.

Our success is measured not only by our list of programs and flights, but also by the fact that we've earned the trust of space agencies like ESA, NASA, CNSA and JAXA, as well as the most respected private contractors in the space industry.

Our flexibility as a smaller, privately-owned design/manufacturer also ensures you'll receive hands-on application support and easy adaptation to the screening and qualification processes you need to meet your mission's exact standards.

So, whether your next mission is to improve a system on an existing space program, or boldly venture into new space missions, you can trust in ERZIA to come through every time.

ERZIA



RELY ON OUR QUALITY

Since day one, it has been ERZIA's objective to earn the confidence of the world's respected defense, space, and commercial communication system suppliers and their customers. We're proud to say that we have achieved this goal by utilizing our ingenuity and microwave engineering expertise, and also by remaining committed to the highest quality standards.

Our quality guidelines are based on European Space Industry ECSS, EN9100, and UNE-EN ISO 9001:2015 standards for the design, development and manufacturing of qualified RF and microwave modules for advanced space, aerospace, defense, and industrial integrations.

ERZIA

WE TAKE YOU FURTHER

ERZIA Technologies
Josefina de la Maza 4
39012 Santander, Spain
Telephone: +34 942 29 13 42

ERZIA Technologies USA
211 North Union Street, Suite 100
Alexandria, VA 22314
Telephone: +1 703-373-1946
Voicemail: +1 703-373-1947

sales@erzia.com | www.erzia.com