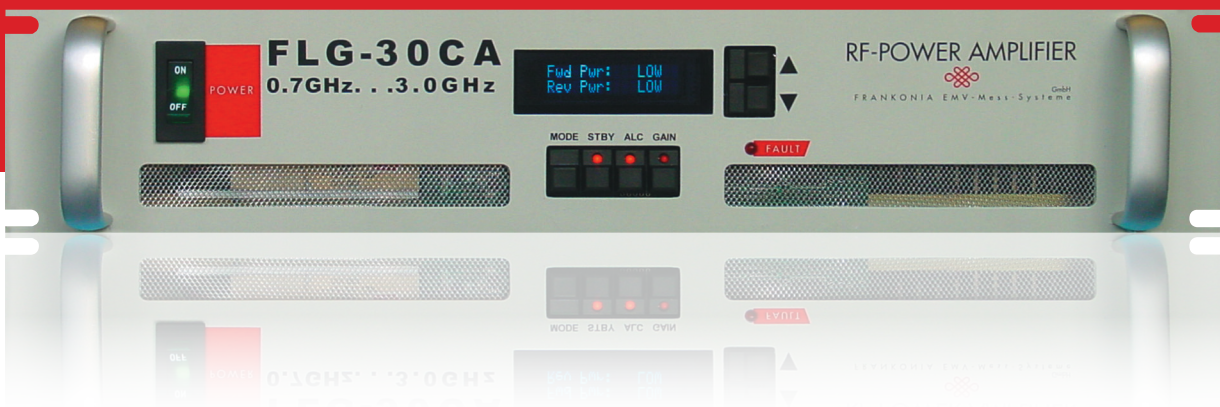


No. 1



BROADBAND RF-POWER-AMPLIFIERS 10 kHz - 6 GHz



For immunity tests according to IEC, EN, ISO, SAE, MIL

Power amplifiers with high linearity and high amplification in a wide frequency range with thermal and over current protection.
Possible signal input formats: CW / AM / PM / FM / PULSE

Broadband RF-Power Amplifiers

Special Features

- The broadband RF – power amplifiers are optimized to have high efficiency, high 1dB compression and high gain
- FRANKONIA RF-power amplifiers supply high linearity in a wide frequency range and a high amplification
- Possible signal input formats: CW / AM / PM / FM / Pulse
- Low noise and distortion
- Large variety of amplifier types for the whole EMC relevant frequency range
- Bulk Current Injection (BCI) applications at our FLC line
- Internal forced air cooling together with internal protection circuits, protect the amplifiers against damage caused by overtemperature (e.g. high room temperature). The occurrence of a fault is shown by a lit indication lamp at the front panel (FAULT)
- The amplifiers can be switched into stand-by mode for safety reasons (e.g. via a door contact relay switch located at an anechoic chamber)
- The amplifiers are constructed in 19" technology.
- GPIB interface and integrated forward / reverse power measurement available as option



Mode of Operation

RF power amplifiers are used to take a low input signal and convert it into a larger output signal that is sufficient high to reach the required test level.

Application Areas

FRANKONIA produces RF-Power Amplifiers whose frequency range and output power have been tailored especially to the applications in EMC immunity test systems according to IEC 61000-4-3 / EN61000-4-3 and IEC 61000-4-6 / EN61000-4-6 or other similar national and international regulations (ISO, SAE, MIL, ETSI, ...).

Frequency Range

Depending on the model the amplifiers are available up to a nominal power of 800W in a frequency range from 10kHz to 6GHz with an operation mode of A/AB.

Add following ordering option at the end of the part number:	Description
F	Front panel Connectors
R or (without mark)	Rear panel Connectors (Standard)
FE	F model w / Control (GPIB) Option
RE	R model w / Control (GPIB) Option
FT	FE model w / Ethernet Interface
RT	FE model w / Ethernet Interface

Our Amplifiers FLL-75, FLC-100, FLC-100E, FLC-150 and FLC-150E basically have front panel connectors without any other options.

10kHz - 230 MHz

Part Number	FLL-25A	FLL-25	FLL-75	FLL-75A	FLL-100A	FLL-250A	FLL-500A
Frequency Range [Hz]	10k-230M	100k-250M	100k-300M	150k-230M	10k-250M	10k-200M	150k-230M
Max. Output Power typically [Watts]	25	25	75	75	100	250	500
Output Power @ 1dB Compression, typ. min. [Watts]	15	20	50	45	60	175	300
RF Input, max [dBm]	0	0	0	0	0	0	0
Gain [dB]	44	46	51	49	50	55	57
Flatness [dB]	±1.5	±1.5	±1.5	±1.5	±2.5	±2	±2
IP3 [dBm], typ.	48	48	52	52	54	60	61
Input VSWR, max.	2:1	1.5:1	1,5:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-15	-20	-20	-15	-15	-15	-15
Spurious Signals @ 1dB comp., [dBc], typical	-60	-75	-75	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	449	449	483 (19")	483 (19")	483 (19")
	H	134	133	133	134	223	223
	D	508	436	436	508	508	508
Weight [kg]	17	8	10	20	34	36	95
AC Power Input [W]	200	150	400	400	600	1200	3500
Power Supply [V AC]	100 - 240	88 - 264	100 - 240	100 - 240	100 - 240	100 - 240	186 - 264
Phases	1	1	1	1	1	1	1
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage

10kHz - 400MHz

Part Number	FLC-75	FLC-100	FLC-100E	FLC-150	FLC-150E
Frequency Range [Hz]	100k-400M	100k-400M	10k-400M	100k-400M	10k-400M
Max. Output Power typically [Watts]	75	140	130	220	180
Output Power @ 1dB Compression, typ. min. [Watts]	50	80	70	140	125
RF Input, max [dBm]	0	0	0	0	0
Gain [dB]	51	51	51	53	53
Flatness [dB]	±1.5	±1.5	±1.5	±1.5	±1.5
IP3 [dBm], typ.	52	58	57	61	60
Input VSWR, max.	1.5:1	1.5:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical	-75	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	449 (19")	460 (19")	460 (19")	460 (19")
	H	133	150	150	150
	D	436	455	455	455
Weight [kg]	10	16	16	20	20
AC Power Input [W]	400	500	500	900	900
Power Supply [V AC]	88 - 264	230	230	230	230
Phases	1	1	1	1	1
Operating Temperature [°C]	0 - 45	0 - 45	0 - 45	0 - 45	0 - 45
Operating Humidity Non-Condensing [%]	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage

1MHz – 1000MHz

Part Number		FLH-5A	FLH-50A	FLH-100A	FLH-200C
Frequency Range [Hz]		1M-1000M	1M-1000M	1M-1000M	20M-500M
Max. Output Power typically [Watts]		4	50	100	200
Output Power @ 1dB Compression, typ. min. [Watts]		2	30	60	120
RF Input, max [dBm]		0	0	0	0
Gain [dB]		36	48	50	54
Flatness [dB]		±1.5	±2	±2	±2
IP3 [dBm], typ.		39	51	54	55
Input VSWR, max.		2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical		-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical		-60	-60	-60	-60
Input / Output Impedance [ohms]		50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out		N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")
	H	89	134	223	223
	D	458	508	508	508
Weight [kg]		20	25	40	37
AC Power Input [W]		100	500	2500	1000
Power Supply [V AC]		100 - 240	100 - 240	200 - 240	100 - 240
Phases		1	1	1	1
Operating Humidity Non-Condensing [%]		95	95	95	95
Cooling		Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection		<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage

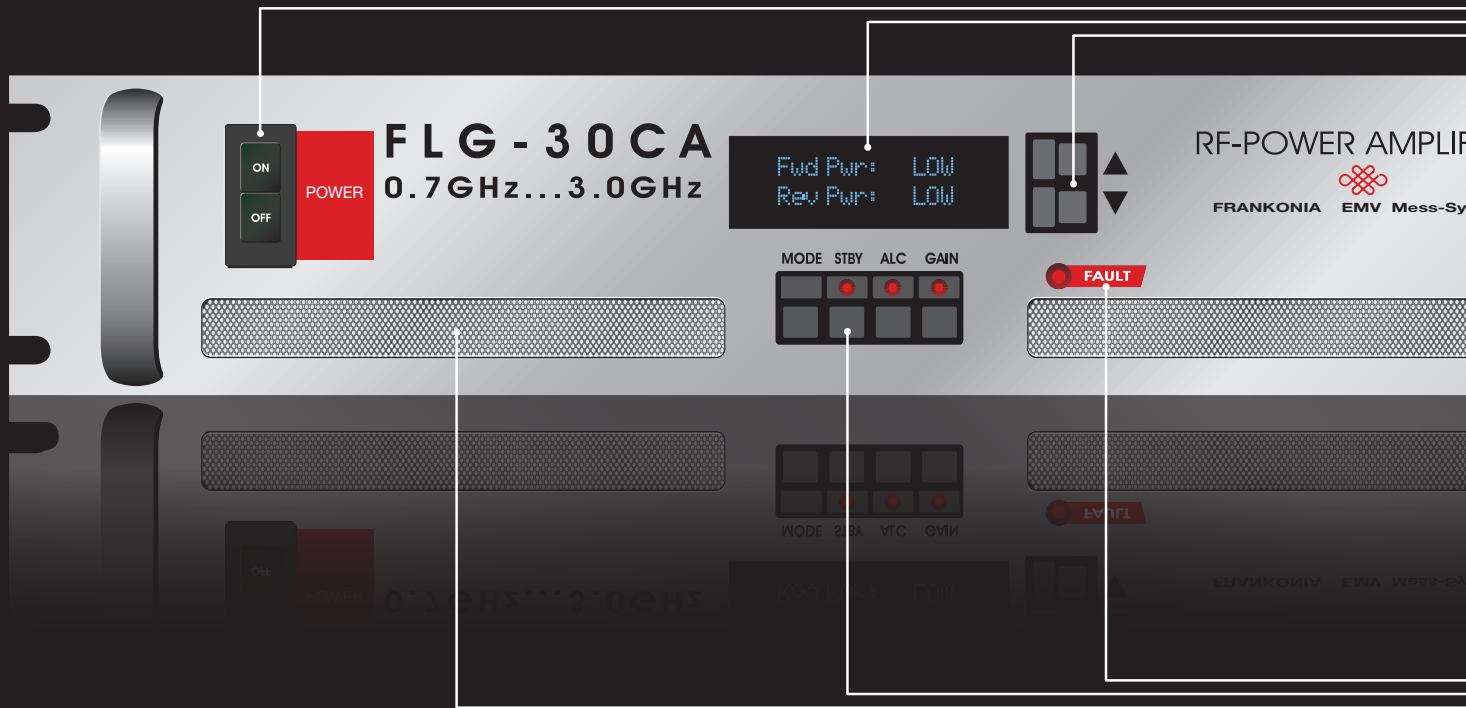
20MHz – 1000MHz

Part Number	FLH-20B	FLH-70B	FLH-120B	FLH-200B	FLH-300B	FLH-500/150B	FLH-500B	FLH-800B	
Frequency Range [Hz]	20M-1000M	20M-1000M	20M-1000M	20M-1000M	20M-1000M	20M-1000M	80M-1000M	80M-1000M	
Max. Output Power typically [Watts]	20	70	120	200	500	500@20-230M 150@230-1000M	500	800	
Output Power @ 1dB Compression, typ. min. [Watts]	10	40	75	120	250	300 / 90	300	500	
RF Input, max [dBm]	0	0	0	0	0	0	0	0	
Gain [dB]	44	49	52	54	58	58 / 53	58	59	
Flatness [dB]	±1.5	±2	±2	±2	±2.5	±2.5	±2.5	±2.5	
IP3 [dBm], typ.	47	52	55	57	58	61 / 56	61	60	
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-15	-15	-25	-15	
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60	-60	-60	
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	788(26")	483(19")	572	788(26")
	H	89	134	178	223	610	356	788	610
	D	458	508	508	508	661	661	661	661
Weight [kg]	12	20	30	40	80	68	180	87	
AC Power Input [W]	200	750	1500	3000	5000	3000	6000	8000	
Power Supply [V AC]	100 – 240	100 – 240	100 – 240	200 – 240	200-240	208-265	186 – 264	200 – 240	
Phases	1	1	1	1	1	1	3	3	
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95	95	95	
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	
Circuit Protection	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Th. Overload • Infinite VSWR • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Th. Overload • VSWR Protection • Over Current • Over Voltage	

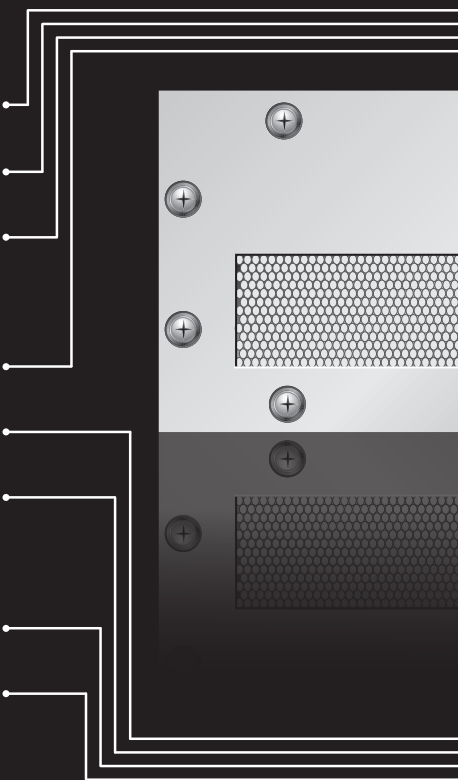
0,8GHz - 2 GHz

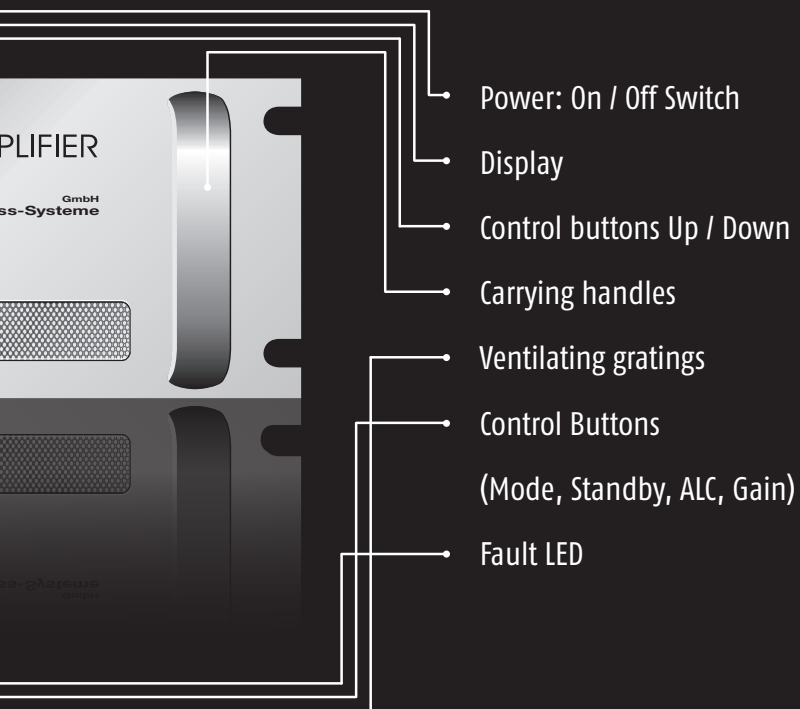
Part Number	FLG-5A	FLG-10A	FLG-25A	FLG-50A	FLG-100A	FLG-200A	FLG-300A
Frequency Range [Hz]	0.8G-2G	0.8G-2G	0.8G-2G	0.8G-2G	0.8G-2G	0.8G-2G	1G-2G
Max. Output Power typically [Watts]	7	12	25	50	100	200	300
Output Power @ 1dB Compression, typ. min. [Watts]	5	10	20	40	80	150	125
RF Input, max [dBm]	+10	+10	+10	+10	+10	+10	+10
Gain [dB]	39	41	44	48	51	54	56
Flatness [dB]	±1.5	±1	±1.5	±1.5	±2	±2	±2
IP3 [dBm], typ.	47	50	53	56	59	62	64
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	483 (19")	483(19")
	H	89	89	89	89	178	223
	D	458	458	458	458	508	674
Weight [kg]	12	13	13	15	30	40	50
AC Power Input [W]	100	120	220	400	1000	1500	2000
Power Supply [V AC]	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240
Phases	1	1	1	1	1	1	1
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	• Thermal Overload	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Infinite VSWR	• Th. Overload • Infinite VSWR • Over Current • Over Voltage	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload	• Thermal Overload • Over Current • Over Voltage

Frankonia Amplifier with GPIB control option (Front view)

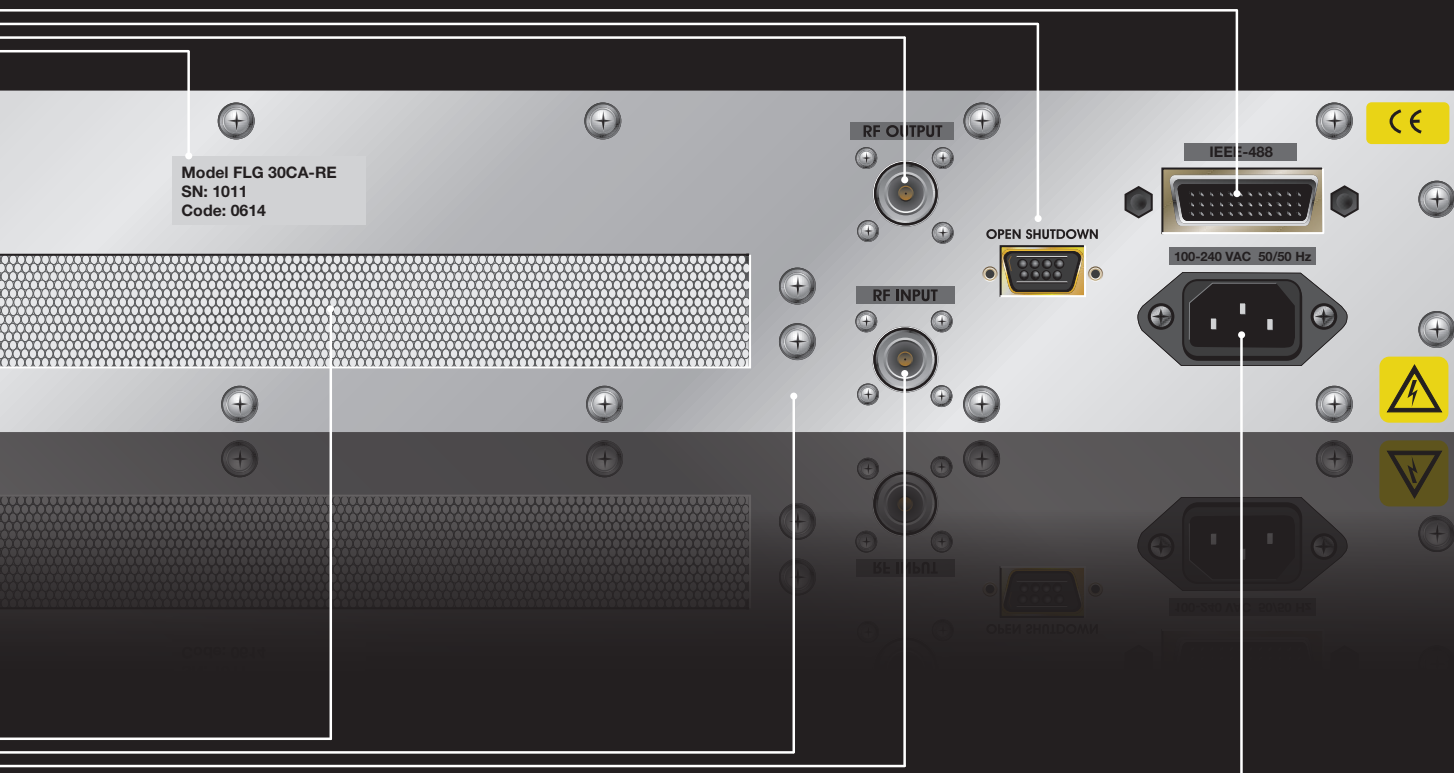


- GPIB (IEEE)
- Stand-by interlock
- RF Output
- Type label with model and serial number
- Ventilating grating
- Back panel (grounded through power cable)
- RF Input
- Power supply





Frankonia Amplifier with GPIB control option (Back view)



0,8GHz – 2,5 GHz

Part Number	FLG-15B	FLG-25B	FLG-50B	FLG-80B	FLG-150B	FLG-250B	FLHG-150C
Frequency Range [Hz]	0.8G-2.5G	0.8G-2.5G	0.8G-2.5G	0.8G-2.5G	0.8G-2.5G	0.8G-2.5G	20M-3G
Max. Output Power typically [Watts]	13	25	50	80	150	250	150
Output Power @ 1dB Compression, typ. min. [Watts]	10	20	40	60	120	120	100
RF Input, max [dBm]	+10	+10	+10	+10	+10	+10	0
Gain [dB]	42	45	48	50	52	55	52
Flatness [dB]	±2	±2	±2	±2	±2	±6dB max.*	±2.5
IP3 [dBm], typ.	50	53	56	58	61	60	56
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20	-15@20M-1G -20@1-3G
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	483 (19")	483 (19")
	H	89	89	134	178	223	356
	D	458	458	508	508	661	661
Weight [kg]	10	15	24	25	40	68	60
AC Power Input [W]	100	300	600	1200	1500	2800	3000
Power Supply [V AC]	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	180 - 264	180-240
Phases	1	1	1	1	1	1	1
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage • VSWR Protection 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage

1GHz – 3GHz

Part Number	FLG-10C	FLG-15C	FLG-30C	FLG-50C	FLG-100C	FLG-200C
Frequency Range [Hz]	1G-3G	1G-3G	1G-3G	1G-3G	1G-3G	1G-3G
Max. Output Power typically [Watts]	10	15	30	50	100	200
Output Power @ 1dB Compression, typ. min. [Watts]	7	12	24	40	80	150
RF Input, max [dBm]	+10	+10	+10	+10	+10	+10
Gain [dB]	38	43	46	48	51	54
Flatness [dB]	±1.5	±1.5	±1.5	±2	±2	±2
IP3 [dBm], typ.	48	51	54	56	59	62
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	609
	H	89	89	89	134	762
	D	458	458	458	508	762
Weight [kg]	15	15	17	23	40	100
AC Power Input [W]	200	200	350	600	1200	2500
Power Supply [V AC]	100 – 240	100 – 240	100 – 240	100 – 240	100 – 240	100 – 240
Phases	1	1	1	1	1	1
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage

0,7GHz – 3GHz

Part Number	FLG-15CA	FLG-30CA	FLG-50CA	FLG-100CA	FLG-200CA	FLG-250CA
Frequency Range [Hz]	0.7G-3G	0.7G-3G	0.7G-3G	0.7G-3G	0.7G-3G	0.7G-3G
Max. Output Power typically [Watts]	15	30	50	100	200	250
Output Power @ 1dB Compression, typ. min. [Watts]	12	24	40	80	150	180
RF Input, max [dBm]	+10	+10	+10	+10	+10	+10
Gain [dB]	43	46	48	51	54	54
Flatness [dB]	±2	±2	±2	±2	±2	±3
IP3 [dBm], typ.	51	54	56	59	62	60
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc] typical	-60	-60	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	610(24")
	H	89	89	134	223	762
	D	458	458	508	661	762
Weight [kg]	15	17	23	40	140	68
AC Power Input [W]	200	350	600	1200	2500	2500
Power Supply [V AC]	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	180 - 264
Phases	1	1	1	1	1	1
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Th. Overload • Over Current • Over Voltage • VSWR Protection

0,8GHz - 4,2GHz

Part Number	FLG-1D	FLG-15D	FLG-30D	FLG-50D	FLG-80D	FLG-250D
Frequency Range [Hz]	0.8G-4.2G	0.8G-4.2G	0.8G-4.2G	0.8G-4.2G	0.8G-4.2G	0.8G-4.2G
Max. Output Power typically [Watts]	1.2	15	28	50	80	250W@0.8-3G 200W@3-4.2G
Output Power @ 1dB Compression, typ. min. [Watts]	1	12	22	40	60	180 / 150
RF Input, max [dBm]	+10	+10	+10	+10	+10	+10
Gain [dB]	30	43	46	48	51	55
Flatness [dB]	±2	±2	±2.5	±2.5	±2.5	±1.5dB max.*
IP3 [dBm], typ.	41	51	54	56	56	60
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W 483(19") H 89 D 458	483 (19") 89 458	483 (19") 89 508	483 (19") 134 508	483(19") 223 661	483(19") 356 661
Weight [kg]	10	15	17	23	37	69
AC Power Input [W]	30	200	350	600	1200	3000
Power Supply [V AC]	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	180 - 264
Phases	1	1	1	1	1	1
Operating Temperature [°C]	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50	0 / + 50
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection	• Thermal Overload • Over Current • Over Voltage	• Thermal Overload • Over Current	• Thermal Overload • Over Current	• Thermal Overload • Over Current	• Thermal Overload • Over Current • Over Voltage	• Th. Overload • Over Current • Over Voltage • VSWR-Protection

* with no ALC, ± 1 dB max. with internal leveling

2GHz - 4GHz

Part Number	FLG-15E	FLG-30E	FLG-50E	FLG-100E	FLG-200E	FLG-600E	
Frequency Range [Hz]	2G-4G	2G-4G	2G-4G	2G-4G	2G-4G	2G-4G	
Max. Output Power typically [Watts]	15	30	50	100	200	600	
Output Power @ 1dB Compression, typ. min. [Watts]	12	24	40	80	150	400	
RF Input, max [dBm]	+10	+10	+10	+10	+10	0	
Gain [dB]	43	46	48	51	54	58	
Flatness [dB]	±1.5	±1.5	±2	±2.5	±2	±2.5	
IP3 [dBm], typ.	51	54	56	59	62	60	
Input VSWR, max.	2:1	2:1	2:1	2:1	2:1	2:1	
Harmonics @ 1dB comp., [dBc], typical	-20	-20	-20	-20	-20	-20	
Spurious Signals @ 1dB comp., [dBc], typical	-60	-60	-60	-60	-60	-60	
Input / Output Impedance [ohms]	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	
Connectors In / Out	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	610 (24")	610(24")
	H	89	89	134	223	762	1524
	D	458	458	508	661	762	1524
Weight [kg]	13	15	24	35	100	182	
AC Power Input [W]	200	350	600	1200	2500	16000	
Power Supply [V AC]	100 - 240	100 - 240	100 - 240	100 - 240	100 - 240	208-260	
Phases	1	1	1	1	1	3	
Operating Humidity Non-Condensing [%]	95	95	95	95	95	95	
Cooling	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air	
Circuit Protection	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Th. Overload • Over Current • Over Voltage • VSWR Protection • etc. * 	

2GHz - 6GHz

Part Number		FLG-10F	FLG-15F	FLG-25F	FLG-50F	FLG-100F
Frequency Range [Hz]		2G-6G	2G-6G	2G-6G	2G-6G	2G-6G
Max. Output Power typically [Watts]		9	15	25	50	100
Output Power @ 1dB Compression, typ. min. [Watts]		6	10	15	30	60
RF Input, max [dBm]		0	0	0	0	0
Gain [dB]		40	43	45	50	53
Flatness [dB]		±1	±1.5	±1.5	±1.5	±3
IP3 [dBm], typ.		46	50	52	54	57
Input VSWR, max.		2:1	2:1	2:1	2:1	2:1
Harmonics @ 1dB comp., [dBc], typical		-20	-20	-20	-20	-20
Spurious Signals @ 1dB comp., [dBc], typical		-60	-60	-60	-60	-60
Input / Output Impedance [ohms]		50 / 50	50 / 50	50 / 50	50 / 50	50 / 50
Connectors In / Out		N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)	N(f)/N(f)
Dimensions [mm]	W	483 (19")	483 (19")	483 (19")	483 (19")	483(19")
	H	89	89	89	134	223
	D	458	458	458	458	508
Weight [kg]		12	12	12	22	37
AC Power Input [W]		100	400	400	800	1600
Power Supply [V AC]		100-240	100-240	100-240	100-240	100-240
Phases		1	1	1	1	1
Operating Humidity Non-Condensing [%]		95	95	95	95	95
Cooling		Internal forced air	Internal forced air	Internal forced air	Internal forced air	Internal forced air
Circuit Protection		<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Thermal Overload • Over Current • Over Voltage 	<ul style="list-style-type: none"> • Th. Overload • Over Current • Over Voltage • VSWR Protection • etc. *

* further information on request

Specifications at 25°C | Specifications subject to change without notice



FRANKONIA

Frankonia EMC Test-Systems GmbH

Daimlerstraße 17
91301 Forchheim

Tel.: +49 (0) 91 91 / 73 666 - 0
Fax. +49 (0) 91 91 / 73 666 - 20

Web. <http://www.frankonia-emv.com>
Mail. sales@frankonia-emv.com