

installation
guide

Profiler Plus
6620



No part of this manual may be copied, reproduced, transmitted, transcribed or translated into any language without permission.

Unitron reserves the right to change the specifications of the hardware and software described in these manuals at any time.

Unitron can not be held liable for any damages resulting from the use of this product.

Specifications are subject to change without notice. 09/11

© Unitron - Frankrijklaan 27 - B-8970 Poperinge - Belgium

T +32 57 33 33 63 **F** +32 57 33 45 24

email sales@johansson.be

www.johansson.be - www.unitrongroup.com

CONTENTS

1 INTRODUCTION	
the Profiler range.....	4
package contents.....	7
safety instructions.....	8
accessories.....	10
2 INSTALLATION OF THE HARDWARE	
module overview.....	11
3 CONFIGURATION OF THE DEVICE	
control unit.....	13
PC control.....	16
4 BLOCK DIAGRAM	17
5 TECHNICAL SPECIFICATIONS	18
6 CONDITIONS OF WARRANTY	19
7 FREQUENCY TABLE	20
8 POWER CONVERSION TABLE	21

1 INTRODUCTION

THE PROFILER RANGE



Profiler Plus 10 clusters » REF. 6620

10 highly selective filters (1-7 channels)

4 UHF inputs

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs



Profiler Plus SAT 10 clusters » REF. 6621

10 highly selective filters (1-7 channels)

4 UHF inputs

SAT input

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs



Profiler Plus **12 clusters » REF. 6622**

12 highly selective filters (1-7 channels)

4 UHF inputs

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs



Profiler Plus SAT **12 clusters » REF. 6623**

12 highly selective filters (1-7 channels)

4 UHF inputs

SAT input

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs



Super Profiler » REF. 6630

2 super selective filters: 30 dB @ 1 MHz

8 highly selective filters (1-7 channels)

frequency conversion functionality

4 UHF inputs

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs



Super Profiler SAT » REF. 6631

2 super selective filters: 30 dB @ 1 MHz

8 highly selective filters (1-7 channels)

frequency conversion functionality

SAT input

4 UHF inputs

FM/VHF/AUX input

high output power: >120 dB μ V

2 programmable outputs

PACKAGE CONTENTS

Be sure all items listed below are included:

1 Profiler Plus module (ref. 6620) _____

1 power cord _____

1 user manual _____

SAFETY INSTRUCTIONS



Read these instructions carefully before connecting the unit




To prevent fire, short circuit or shock hazard:

- Do not expose the unit to rain or moisture.
- Install the unit in a dry location without infiltration or condensation of water.
- Do not expose it to dripping or splashing.
- Do not place objects filled with liquids, such as vases, on the apparatus.
- If any liquid should accidentally fall into the cabinet, disconnect the power plug.



To avoid any risk of overheating:

- Install the unit in a well aery location and keep a minimum distance of 15 cm around the apparatus for sufficient ventilation.
- Do not place any items such as newspapers, table-cloths, curtains,... on the unit that might cover the ventilation holes.
- The unit must not be exposed to any source of heat (sun, heater,...).
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- Do not install the product in a dusty place.
- Use the apparatus only in moderate climats (not in tropical climates).
- Respect the minimum and maximum temperature specifications.


 To avoid any risk of electrical shocks:

- Connect apparatus only to socket with protective earth connection.
- The mains plug shall remain readily operable.
- Pull out power plug to make the different connections of cables.
- To avoid electrical shock, do not open the housing of adapter.



Maintenance

 Only use a dry soft cloth to clean the cabinet.

 Do not use solvent.

 For repairing and servicing refer to qualified personnel.



Dispose according your local authority's recycling processes

ACCESSORIES



Control Unit » REF. 6565

control different Johansson products

big OLED display for easy reading

operating voltage: 5-24V

power through coax cable or with delivered adapter



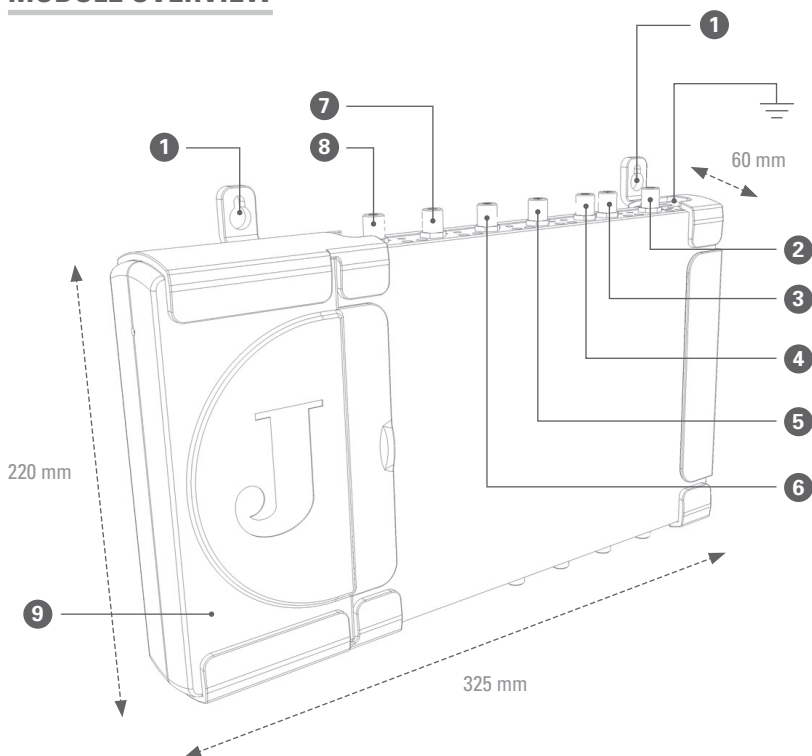
Ethernet-To-Coax » REF. 6564

control profiler products by PC (this unit is the bridge between the coax and the PC)

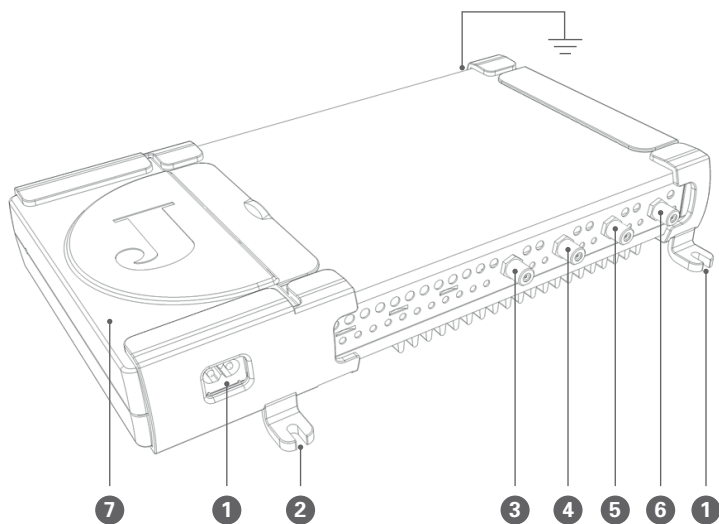
operating voltage: 5-24V

2 INSTALLATION OF THE HARDWARE

MODULE OVERVIEW



- 1 hole for mounting screw
- 2 SAT input (6621 / 6623 / 6631 only)
- 3 BI-FM input
- 4 BIII-DAB input
- 5 UHF input 1
- 6 UHF input 2
- 7 UHF input 3
- 8 UHF input 4
- 9 detachable power supply



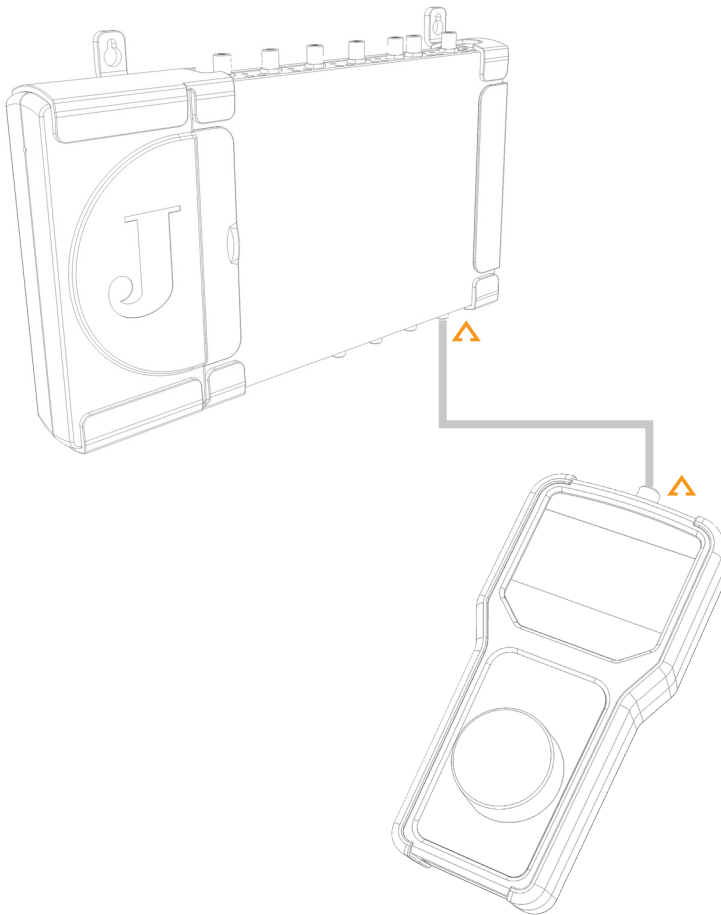
- ① power cord connection
- ② hole for mounting screw
- ③ AUX (VHF-UHF) output
- ④ TV output 2
- ⑤ TV output 1 & control unit input
- ⑥ test output (-30 dB)
- ⑦ detachable power supply

3 CONFIGURATION OF THE DEVICE

There are two ways of configuring the Profiler. In both cases, you need an optional accessory. The operation of these accessories is described in the respective manuals.

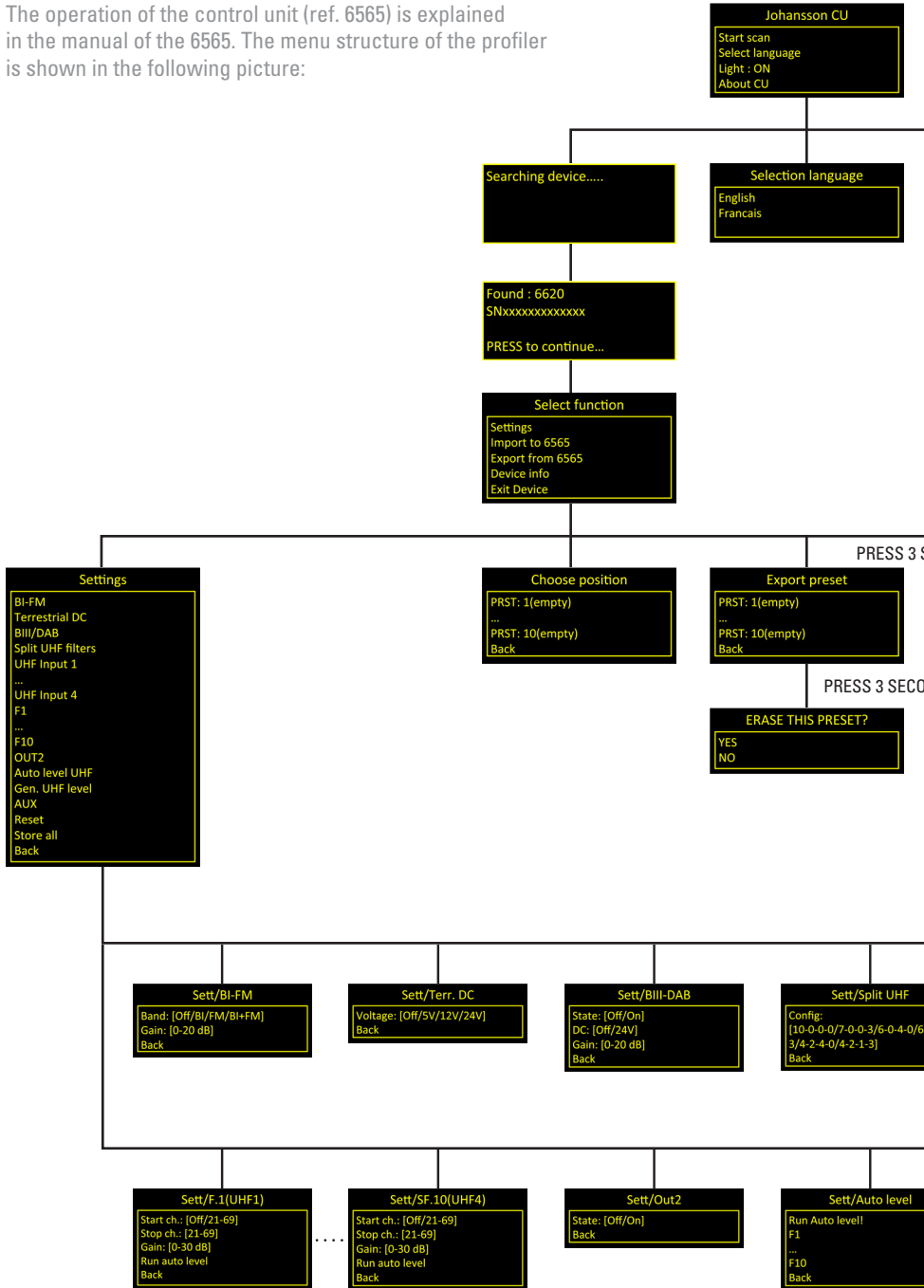
CONTROL UNIT

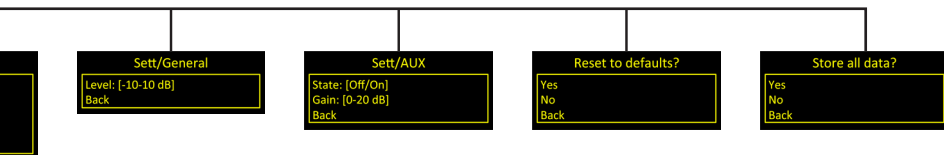
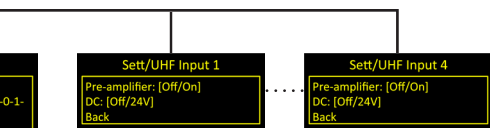
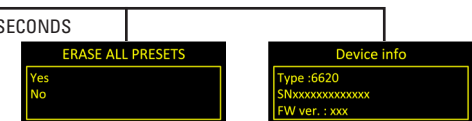
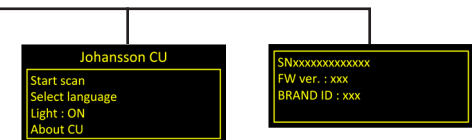
The device can be controlled by means of a separate control unit (ref. 6565), which is connected to the test output port of the unit.



Operation of the control unit is described in the user manual of the device (ref. 6565).

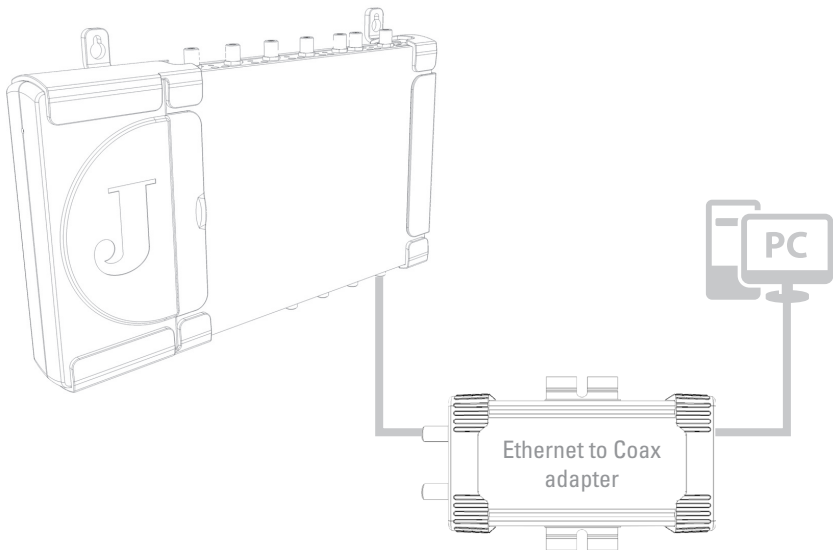
The operation of the control unit (ref. 6565) is explained in the manual of the 6565. The menu structure of the profiler is shown in the following picture:





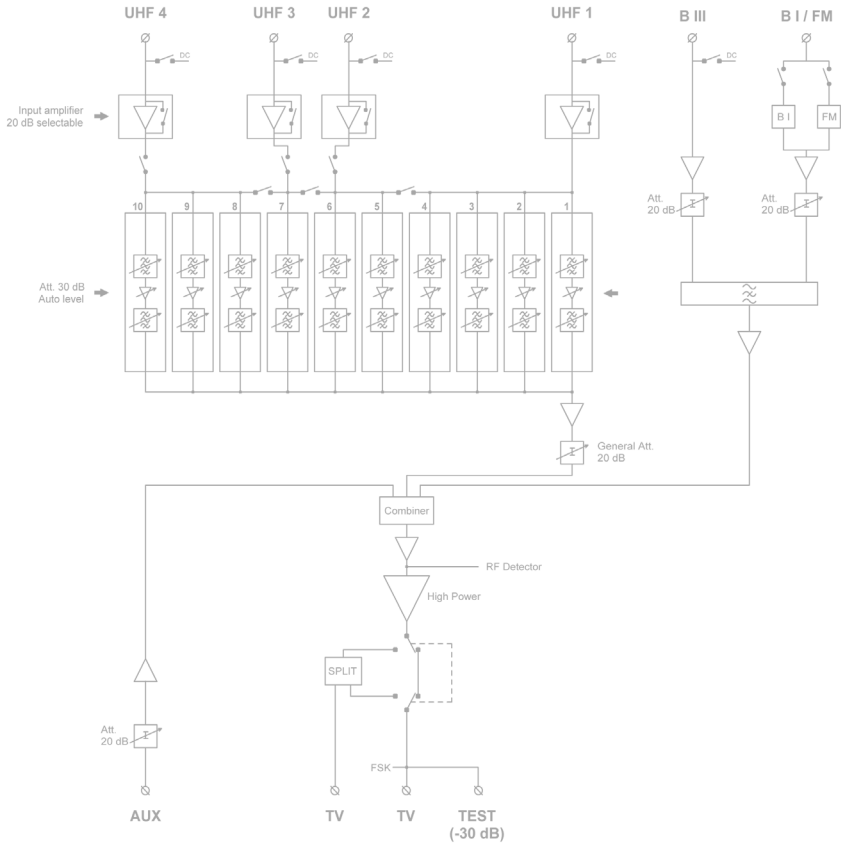
PC CONTROL

The device can be controlled by PC with our advanced UUI (Universal User Interface). You need an Ethernet to Coax adapter (ref. 6564) and the UUI software. The UUI gives access to all possible functionalities of the hardware and allows an easy and convenient way of configuring the device.



Operation of the Ethernet to Coax module and the UUI are described in the respective user manuals.

4 BLOCK DIAGRAM



5 TECHNICAL SPECIFICATIONS

6620 PROFILER PLUS	BI-FM	BIII/ DAB	AUX	UHF1	UHF2	UHF3	UHF4
FREQUENCY RANGE (MHz)	47-68 88-108	174-240	47-862	470-862	470-862	470-862	470-862
FILTER BANDWIDTH (MHz)	-			8-56 (1 to 7 channels)			
GAIN* (dB)	35	40	30	60			
ATTENUATOR (dB)	20	20	20	30			
GENERAL UHF LEVEL ADJUSTMENT (dB)	-	-	+10 to -10				
NOISE FIGURE (dB)	7	5	15	6			
MAX. INPUT LEVEL (dB μ V)	80	80	80	105			
MAX. OUTPUT LEVEL* (dB μ V) -60 dB IM 3	118	118	122	122			
SELECTIVITY	-	-	-	30 dB/16 MHz			
RETURN LOSS IN / OUT (dB)	>10	>10	>10	>10	>10	>10	>10
SELECTABLE REMOTE POWER 12-24V (100 mA in total)	-	yes	-	yes	yes	yes	yes
OUTPUTS	TV 1 / TV 2 / Test -30 dB						
POWER SUPPLY (V-)	230-240						
OPERATING TEMPERATURE (°C)	- 5 to + 50						
DIMENSIONS (mm)	325 X 220 X 60						

* 1 output active (2 outputs active = - 5 dB)

6 CONDITIONS OF WARRANTY

PERIOD OF WARRANTY

Unitron N.V. warrants the product as being free from defects in material and workmanship for a period of 24 months starting from the date of production indicated on it. See note below.

If during this period of warranty the product proves defective, under normal use, due to defective materials or workmanship, Unitron N.V., at its sole option, will repair or replace the product. Return the product to your local dealer for reparation.

THE WARRANTY IS APPLIED ONLY FOR DEFECTS IN MATERIAL AND WORKMANSHIP AND DOES NOT COVER DAMAGE RESULTING FROM

- Misuse or use of the product out of its specifications.
- Installation or use in a manner inconsistent with the technical or safety standards in force in the country where the product is used.
- Use of non-suitable accessories (power supply, adapters ...).
- Installation in a defect system.
- External cause beyond the control of Unitron N.V. such as drop, accidents, lightning, water, fire, improper ventilation...

THE WARRANTY IS NOT APPLIED IF

- Production date or serial number on the product is illegible, altered, deleted or removed.
- The product has been opened or repaired by a non-authorized person.

NOTE

Date of production is MMY format, example 0411 = April 2011.
For the serial number barcodes, the date corresponds to the 4 first numbers.

7 UHF FREQUENCY TABLE

TV band	Channel	Frequency MHz
IV	21	470-478
	22	478-486
	23	486-494
	24	494-502
	25	502-510
	26	510-518
	27	518-526
	28	526-534
	29	534-542
	30	542-550
	31	550-558
	32	558-566
	33	566-574
	34	574-582
	35	582-590
	36	590-598
	37	598-606
V	38	606-614
	39	614-622
	40	622-630
	41	630-638
	42	638-646
	43	646-654
	44	654-662
	45	662-670
	46	670-678
	47	678-686
	48	686-694
	49	694-702
	50	702-710
	51	710-718
	52	718-726
	53	726-734
	54	734-742
	55	742-750
	56	750-758
	57	758-766
	58	766-774
	59	774-782
	60	782-790
	61	790-798
	62	798-806
	63	806-814
	64	814-822
	65	822-830
	66	830-838
	67	838-846
	68	846-854
	69	854-862

8 POWER CONVERSION TABLE

$\mu\text{V } 75 \Omega$	$\text{dB}\mu\text{V}$	dBm
1	0	-109
1.5	3.5	-105.5
2	6	-103
2.5	8.0	-101
3	9.5	-99.5
3.5	11	-98
4	12	-97
4.5	13	-96
5	14	-95
6	15.5	-93.5
7	17	-92
8	18	-91
9	19	-90
10	20	-89
15	23.5	-85.5
20	26	-83
25	28	-81
30	29.5	-79.5
35	31	-78
40	32	-77
45	33	-76
50	34	-75
60	35.5	-73.5
70	37	-72
80	38	-71
90	39	-70
100	40	-69
150	43.5	-66.5
200	46	-63
250	48	-61
300	49.5	-59.5
350	51	-58
400	52	-57
450	53	-56
500	54	-55
600	55.5	-53.5
700	57	-52
800	58	-51
900	59	-50

$\text{mV } 75 \Omega$	$\text{dB}\mu\text{V}$	dBm
1	60	-49
1.5	63.5	-45.5
2	66	-43
2.5	68	-41
3	69.5	-39.5
3.5	71	-38
4	72	-37
4.5	73	-36
5	74	-35
6	75.5	-33.5
7	77	-32
8	78	-31
9	79	-30
10	80	-29
15	83.5	-25.5
20	86	-23
25	88	-21
30	89.5	-19.5
35	91	-18
40	92	-17
45	93	-16
50	94	-15
60	95.5	-13.5
70	97	-12
80	98	-11
90	99	-10
100	100	-9
150	103.5	-5.5
200	106	-3
250	108	-1
300	109.5	+0.5
350	111	+2
400	112	+3
450	113	+4
500	114	+5
600	115.5	+6.5
700	117	+8
800	118	+9
900	119	+10
1000	120	+11

$\text{V } 75 \Omega$	$\text{dB}\mu\text{V}$	dBm
1	120	+11
1.5	123.5	+14.5
2	126	+17
2.5	128	+19
3	129.5	+20.5
3.5	131	+22
4	132	+23
4.5	133	+24
5	134	+25
6	135.5	+26.5
7	137	+28
8	138	+29
9	139	+30
10	140	+31



www.unitrongroup.com

UNITRON NV
Frankrijklaan 27
B-8970 Poperinge
Belgium

T +32 57 33 33 63
F +32 57 33 45 24

sales@johansson.be
www.johansson.be