



RPU500 is a full duplex device especially designed for Outside Broadcast reportage. It features in a very compact format a **1 watt ultra-wideband 170-960 MHz transmitter** and an intercom **receiver**.





Multi-BAND

Ultra-wideband VHF & UHF to find your frequency anywhere in the World.



Low Energy

Monitor & control through USB-C/Bluetooth* (Wisycom Manager software)



4 ways talk-back

4 programmable buttons for talk back with remote audio routing (on additional AUX or throu Ethernet with Ember+)



Embedded Recorder

Audio recording on memory card (SD)



Audio recording on memory card (SD)*

OTHER FEATURES

- High transmitter power output (up to 1W)
- Long battery-lifetime > 5 hours with standard battery pack RRC2040

i.e. to broadcast recorder interview along with live comment (AUX/MAIN mixed)

- Receiver can operate in 3 modes (selectable by menu):
 - As talkback Mobile (channel spacing 12,5k)
 - As talkback Mobile (channel spacing 50k)
 - As IFB (channel spacing 110k), with the possibility of embedded 3 audio sources on the same carrier*
- 1 MAIN audio input connector XLR balanced with 48V/12V phantom
- 2 audio outputs (waterproof jack 3.5mm): i.e. journalist/guest and 1 AUX audio shared input (waterproof jack 3.5mm)
- Transflective color display with high visibility in the sun
- Ergonomic and compact size

*Available soon

WISYC@M







CONFIGURATIONS

TRANSMITTER RANGE and COUNTRY POWER PROFILE



RECEIVER RANGE



VARIANTS: RPU500-<Country>_<Tx Range>-<Rx Range>-<Rx Step>

ex. RPU500-EUX_T2-R2-RS2: Europe 1 Watt, TX: 170-230+440-696+715-744+940-960 MHz, RX: 414-421+422-574 MHz step 6.25kHz RPU500-EUX_T3-R3: Europe 1 Watt, TX: 170-230+510-775+940-960 MHz, RX: 470-670 MHz standard step 5kHz RPU500-EUX_T2-R4: Europe 1 Watt, TX: 170-230+440-696+715-744+940-960 MHz, RX: 412-542 MHz step 5kHz

NOTE:

When TX works in UHF, install the filter AFTxxx and set the transmitter's frequency at least 40 MHz above than receivers frequency.

On the below table the selectable range in MHz according to the filter installed on the antenna of transmitter:

RPU500-xxx_T2-R3:

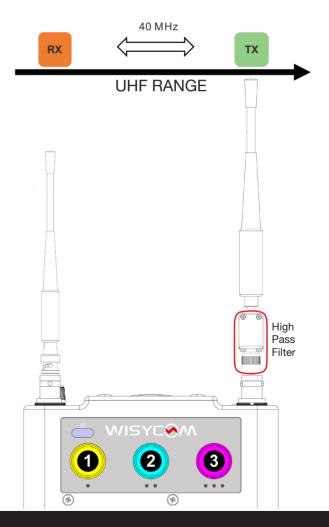
	Filter		
	NOT required	AFT-530	AFT-580
Range TX	170-230	535-696 715-744 940-960	582-696 715-744 940-960
Range RX	470-670	470-493	470-542

RPU500-xxx_T2-R2:

	Filter		
	NOT required	AFT-530	AFT-580
Range TX	170-230	535-696 715-744 940-960	582-696 715-744 940-960
Range RX	414-574	414-493	414-542

RPU500-xxx_T3-R3:

	Filter		
	NOT required	AFT-530	AFT-580
Range TX	170-230	535-775 940-960	582-775 940-960
Range RX	470-670	470-493	470-542









ACCESSORIES & RELATED



Item: PSP15V1A2-H

AC/DC Power Supply with Hirose 4-pin connector Input: 90 ÷ 264 Vac Ouput: 15V 1.2mA (18W)Supplied with EU/ UK/USA/AU plug



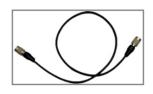
Item:CAUSBC1

USB Cable 1m USB B - USB C Male Black To monitor/control RPU500



Item: BCL500

Belt Clip RPU500



Item: CDC34HM

External power feeding cable, hirose 4-pin male/hirose 4-pin male(50 cm)



Item: CNANT-TNC

FME-TNC Male black adapter when the AFT filter is not installed



Item: LBP500

Standard Lithium Battery pack 10.80V / 3.35Ah / 36.20Wh



Item: AFT530/AFT580

High Pass Filter at 530/AFT580 MHz to install between transmission antenna (BFME connector) and RPU500 Full Duplex TNC connector (other frequency on request)



Item: LBC500

Mini Smart Battery Charger with external power supply



Item: AWT500-xxx

1/2 Dipole antenna with TNC connector for RPU500 transmitter VHF range

Item: AWF500-xxx

1/2 Dipole antenna with FME connector for RPU500 transmitter UHF range



Item: CAL1x

Power Cord 2 m. black CAL11: USA, NEMA 5-15P / IEC 60320 C5, CAL12: Europe, SCHUKO / IEC 60320 C5

CAL13: UK, UK / IEC 60320 C5



	Code	Band MHz	T2	T3		
VHF	AWT500-180	170-188	✓	\checkmark		
	AWT500-197	188-206	✓	\checkmark		
	AWT500-213	206-220	✓	\checkmark		
	AWT500-229	220-238	_ <	\checkmark		
UHF	AWF500-455	440-470 분 1 470-517 원	× ×			
	AWF500-494	470-517 2	<u>₹</u>			
	AWF500-540	515-563	✓	\checkmark		,
	AWF500-590	562-609	/	\checkmark		
	AWF500-625	609-645	✓	\checkmark	300	580
	AWF500-670	645-696	✓	\checkmark	<u>1-5</u>	12
	AWF500-720	696-744	\	√	ĮĻ,	آ
	AWF500-770	744-798	✓	\checkmark	⋖	<
	AWF500-950	940-960	/	✓_	Ι.]

^{*}FME/TNC adapter to order separately (code: CNANT-TNC) when filter (AFT-xxx) is not installed



Item: AWB500-Rxxx

1/4 Dipole antenna with BNC connector for RPU500 receiver

Antennas for receiver:

Code	Band MHz	R2	R3	R4
AWB500-R440	410-470	/		✓
AWB500-R500	450-550			\checkmark
AWB500-R520	470-574	/	\checkmark	
AWB500-R620	570-670		/	

CONFORMITY









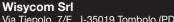


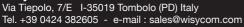
















TECHNICAL SPECIFICATIONS

	Frequency ranges	from 170 to 960 MHz, depends on the variants (see Configurations) NOTE: When TX works in UHF, install the filter AFTxxx and set the transmitter's frequency about 40 MHz above than receivers frequency ex. TX freq. ≥530 MHz and RX: 470-490 MHz
	Switchable channels	2400 managed in 40 groups ofr 60 frequencies completely user customizable
품	Frequencies step	5 kHz minimum step
置	Frequency error	$<\pm 2.5$ ppm, in the rated temperature range
IRANSMITTER	RF Power	switchable Low / Medium / High, typ. 100mW / 300mW / 1W (*) note: in some countries high power can be disabled, for local norm!
AN	Antenna connector	TNC type female (BNC for RPU500-FD1 version), 50 ohm
臣	Modulation	FM mono, wideband or narrowband IFB (SW selectable)
	Nominal deviation	±40 kHz (wideband), ± 25 kHz (narrowband)
	Peak deviation	±56 kHz (wideband), ± 35 kHz (narrowband)
	Spurious emissions	< 2 nW (typical = 0.1 pW)
	Frequency ranges	from 412 to 670 MHz, depends on the variants (see Configurations)
	Switchable channels	2400 managed in 40 groups ofr 60 frequencies completely user customizable
RECEIVER RF	Frequency step	5 kHz step (default), other on request options: RS2 = 6.25 kHz, RS3 = 10 kHz, RS4 = 12.5 kHz, RS5 = 20 kHz, RS6 = 25 kHz, RS7 = 125 kHz
Ä	Frequency error	$<\pm 2.5$ ppm, in the rated temperature range
Æ	Antenna connector	BNC type female, 50 ohm
	Modulation	FM intercom and IFB (SW selectable)
	Peak deviation	\pm 35 kHz (IFB narrowband), \pm 8,5 kHz (Talkback 50Khz), \pm 4 kHz (Talkback 12,5Khz)
	Noise Reduction system	ENS - Wisycom Extended-Sound Optimized (other on request)
AUDIO	AF bandwidth for TX	SW switchable: $50 \text{ Hz} \div 20 \text{ KHz}$ (1dB) (ENS-Wideband) $50 \text{ Hz} \div 15 \text{ KHz}$ (1dB) (ENS-Narrowband)
	AF bandwidth for RX	SW switchable (other on request): - NB: 40 Hz+15 KHz (-1dB), IFB Narrowband 110KHz channel spacing, compatible with MTK982/MTK952A (set Receiver RPU500 NB) & MTP60/61 (ENS-NB compander) - ENS-50K: 300 Hz ÷ 6 KHz (-1dB), Talkback 50Khz channel spacing, compatible with MTK982/MTK952A (set Receiver RPU500 50K) - ENS-12K5: 300 Hz ÷ 3 KHz (-1dB), Talkback 12,5Khz channel spacing, compatible with MTK982/MTK952A (set Receiver RPU500 12K5) - COM-12K5: 300 Hz ÷ 3 KHz (-1dB), Talkback 12,5Khz channel spacing, compatible with Communication TX (no compander, 750 µs de-emphasis) as Motorola CDM1250™
	Audio connectors	1 x XLR3-F type (MIC/Line level) for audio input 1 x Jack 3.5mm for AUX audio input/output (sw selectable) 1 x Jack 3.5mm for audio output
	Managing interface	USB C, Bluetooth 5(*)
	Command buttons & signaling	Pgm, Talkback 1, Talkback 2, Talkback 3
	Display	Transflective color display with high visibility in the sun
	Power supply	standard battery pack RRC2040 External = 10 ÷ 18 Vdc (10W max) with Hirose 4-pin connector
OTHERS	Power consumption	TRANSMITTER: 440mA @12V / 5.28W in VHF range 450 ÷ 530 mA @12V in UHF range depending of the frequency and temperature (display off, 1 Watt) RECEIVER: 70 mA @12V / 0.84W
	Battery life	> 5h (power profile & IIP3 trade off) with Lithium RRC2040
	Temperature range	-10 ÷ +55 °C
	Dimensions	114mm x 118mm x 55mm (H x W x D) with beltclip
	Weight	800g (battery included)

 $(\sp{*})\mbox{Bluetooth}$ interface disabled for Mexico, Japan and South Korea.

