WORLD'S MOST COMPLETE DMR SERIES

DMR Series		PD3 SERIES		PD4 SERIES		PD5 SERIES		PD6 SERIES			PD7 SERIES				X1 SERIES		MD6 SERIES	MD7 SERIES
Model		PD35X/PD36X	PD37X	PD40X	PD41X	PD50X	PD56X	PD60X	PD66X	PD68X	PD70X / PD70X(UL913)	PD78X / PD78X(UL913)	ATEX Radio PD71X Ex	ATEX Radio PD79X Ex	X1e	X1p / X1p(UL913)	Mobile Radio MD65X	Mobile Radio MD78X
Frequency Range	Capable of operating in the following frequency ranges	UHF:400-440MHz 430-470MHz	UHF:400-450MHz 430-480MHz	UHF:400-470MHz VHF:136-174MHz	UHF:400-470MHz 450-520MHz VHF:136-174MHz	UHF: 400-470MHz VHF: 136-174MHz		UHF: 400-527MHz VHF: 136-174MHz			UHF: 400-470MHz, 450-520MHz, 350-400MHz[1], *806-941MHz*[2] VHF: 136-174MHz		UHF: 400-470MHz VHF: 136-174MHz		UHF: 400-470MHz, 450-520MHz, 350-400MHz[1], *806-941MHz*[2] VHF: 136-174MHz		UHF: 400-470MHz, 450-527MHz VHF: 136-174MHz	UHF: 400-470MHz, 450-520MHz, 350-400MHz, 806-941MHz[2] VHF: 136-174MHz
RF Power Output	Radio's high power and low power rating	3W/ 1.5W		UHF: 1W/ 4W VHF: 1W/ 5W		UHF: 1W/ 4W VHF: 1W/ 5W		UHF: 1W/ 4W VHF: 1W/ 5W			UHF1/UHF2/UHF3[3]: 1W/ 4W VHF: 1W/ 5W *UHF5*[3]*:1W/ 3W (806-870MHz), 1W/ 2.5W (896-941MHz)*		1W		UHF1/UHF2/UHF3[3]: 1W/ 4W VHF: 1W/ 5W *UHF5*[3]*:1W/ 3W (806-870MHz), 1W/ 2.5W (896-941MHz)*		UHF: 1-25W VHF: 1-25W	Low Power Model: UHF1/UHF2/UHF3: 5-25W, VHF:5-25W High Power Model: UHF1/UHF2/UHF3: 5-45W, UHF5[3]: 5-35W, VHF: 5-50W
Rated Audio Power Output	Rated radio speaker power output	0.4W		0.5W		0.5W		0.5W			0.5W		0.5W		0.5W		MIC:1.5W / External:7.5W	Internal:3W / External:7.5W
Display	Displays provide easy access to advanced features	2 line monochrome		NA		NA	2 line monochrome	NA	4 line colour	4 line colour	NA	4 line colour	NA	4 line colour	NA	4 line colour	NA	4 line colour
Keypad	Keypads provide access to radio controls, texting and telephony	Limited keypad		NA		NA	Limited keypad	NA	Limited keypad	Full keypad	NA	Full keypad	NA	Full keypad	NA	Full keypad	NA	Limited keypad
Zone Capacity	Max zone capacity (Each zone contains up to 16 channels)	16		3		16	32	3	64	64	3	64	3	64	3	64	64	
Channel Capacity	Programmable channel capacity	256		256		256	512	1024			1024		1024		1024		1024	
Dedicated Emergency Button	Orange programmable button for one-touch emergency call	NA		NA		NA		NA			Support		Support		Support		Support by palm microphone	Support
Programmable Buttons	Allow most often used function with one press	4		2		1	6	1	6	3(numeric key can be programed)	3	5(numeric key can be programed)	3	5(numeric key can be programed)	2	4(numeric key can be programed)	3(palm microphone)	7
Digital Vocoder Type	AMBE+2™ or SELP	AMBE+2™		AMBE+2™		AMBE+2™/SELP		AMBE+2™/SELP			AMBE+2™/SELP		AMBE+2™/SELP		AMBE+2™/SELP		AMBE+2™/SELP	
Channel Spacing	The frequency interval of adjacent channels	Analog:25/12.5kHz Digital:12.5kHz		Analog:25/12.5kHz Digital:12.5kHz		Analog:25/20/12.5kHz Digital:12.5kHz		Analog:25/20/12.5kHz Digital:12.5kHz			Analog:25/20/12.5kHz Digital:12.5kHz		Analog:25/20/12.5kHz Digital:12.5kHz		Analog:25/20/12.5kHz Digital:12.5kHz		Analog:25/20/12.5kHz Digital:12.5kHz	
Available Battery	Available battery with different electric capacity	2000mAh (Li-Ion)		1500mAh (Li-Ion) 2000mAh (Li-Ion)		1500mAh (Li-Ion) 2000mAh (Li-Ion)		1500mAh (Li-Ion) 2000mAh (Li-Ion)			2000mAh (Li-Ion) 2400mAh (Li-Ion) (UL913) 2500mAh (Li-Ion)		1800mAh (Li-Ion)		1100mAh (Li-Ion) 1400mAh (Li-Ion)[7] 1800mAh (Li-Ion)		NA	
Battery Life	Max working time under 5-5-90 Duty Cycle (5% Tx, 5% Rx and 90% Standby)	Digital: 12 hours Analog: 10 hours		Digital: 16 hours @1500mAh 22 hours @2000mAh	Analog: 12 hours @1500mAh 16 hours @2000mAh	Digital: 16 Hours @1500mAh 20 Hours @2000mAh	Analog: 11.5 Hours @1500mAh 15.3 Hours @2000mAh	Digital: 16 Hours @1500mAh 20 Hours @2000mAh	Analog: 11.5 Hours @1500mAh 15.3 Hours @2000mAh		Digital: 15 Hours @2000mAh 18 Hours @2000mAh	Analog: 13 Hours @2000mAh 15 Hours @2500mAh	Digital: 17 hours Analog: 14.5 hours		Digital: 10 Hours @1100mAh 12 Hours @1400mAh 15 Hours @1800mAh	Analog: 7 Hours @1100mAh 9 Hours @1400mAh 12 Hours @1800mAh	NA	
Dimensions (H×W×L) mm	The size of radio	123 X 55 X 23 mm (PD35X) 106 X 54 X 23 mm (PD36X)	111 X 54 X 23 mm	112 X 54 X 28 mm (1500mAh) 112 X 54 X 32 mm (2000mAh)	112 X 54 X 31 mm (1500mAh) 112 X 55 X 35 mm (2000mAh)	115 X 54 X 27 mm (1500mAh) 115 X 54 X 31 mm (2000mAh)	115 X 54 X 30 mm (1500mAh) 115 X 54 X 34 mm (2000mAh)	119 X 54 X 27 mm (1500mAh) 119 X 54 X 31 mm (2000mAh)	133 X 55 X 27 mm (1500mAh) 133 X 55 X 31 mm (2000mAh)	133 X 55 X 27 mm (1500mAh) 133 X 55 X 31 mm (2000mAh)	125 X 55 X 35 mm (2000mAh) 125 X 55 X 40 mm (2500mAh)	125 X 55 X 37 mm (2000mAh) 125 X 55 X 42 mm (2500mAh)	141 X 55 X 37 mm	141 X 55 X 39 mm	119.5 X 57 X 18 mm (1100mAh) 119.5 X 57 X 20 mm (1400mAh) 119.5 X 57 X 23 mm (1800mAh)	119.5 X 57 X 21 mm (1100mAh) 119.5 X 57 X 23 mm (1400mAh) 119.5 X 57 X 26 mm (1800mAh)	165 X 46 X 140 mm	60 X 174 X 200 mm
Weight	The weight of radio with antenna and battery	160g	165g	270g (1500mAh) 289g (2000mAh)	270g (1500mAh) 289g (2000mAh)	260g (1500mAh) 279g (2000mAh)	280g (1500mAh) 299g (2000mAh)	290g (1500mAh) 309g (2000mAh)	310g (1500mAh) 329g (2000mAh)	310g (1500mAh) 329g (2000mAh)	335g (2000mAh) 365g (2500mAh)	355g (2000mAh) 385g (2500mAh)	485g	495g	225g (1100mAh) 242g (1400mAh) 262g (1800mAh)	252g (1100mAh) 265g (1400mAh) 287g (1800mAh)	1050g	1700g
Receiver Sensitivity (Digital)	The minimum magnitude requirement of receiving digital signal	0.22 μV (5% BER)		0.22 μV (5% BER)		0.22 μV (5% BER)		0.22 μV (5% BER)			0.3 μV (5% BER)		0.3 μV (5% BER)		0.3 μV (5% BER)		0.3μV /BER5%	
Receiver Sensitivity (Analog)	The minimum magnitude requirement of receiving analog signal	0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)		0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)		0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)		0.22μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)			0.3μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)		0.3μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)		0.3μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)		0.3μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)	
Frequency Stability	The level of frequency drift	±0.5ppm		±0.5ppm		±0.5ppm		±0.5ppm			±1.5ppm		±1.5ppm		±1.5ppm		±0.5ppm	±1.5ppm
IP Rating	Dust & water-proof rating	IP54		IP55	IP54	IP54		IP67			IP67		IP67		IP67		IP54	
Military Standard	Humidity, shock & vibration proof certificate	MIL-STD-810 C/D/E/F/G Standard																
General Features																		
Direct Mode Operation	Direct radio-to-radio operation	Support		Support		Support		Support			Support		Support		Support		Support	
Repeater Mode Operation	Transmit and receive under repeater operation	Support		Support		Support		Support			Support		Support		Support		Support	
Hytera Dispatch System	DMR Tier-2 dispatch system	NA		NA		NA		Support			Support		Support		Support		Support as terminal only	as dispatch station & terminal
GPS	GPS receiver for location monitoring	NA		NA		NA		Optional			Optional		Support		Support		Optional	
GPS SMS	Send GPS position via text message	NA		NA		NA		Only encode	Support	Support	Only encode	Support	Only encode	Support	Only encode	Support	Only encode	Support
Integrated GLONASS	Integrated GLONASS receiver for location monitoring	NA		NA		NA		NA			Optional[8]		NA		NA		NA	Optional
Mandown	Allow the radio to enter emergency mode while tilting to a specified gradient	NA		NA		NA		Optional			Optional[8]		Support		Support		NA	
Vibration	Allow the radio to make a vibration alert for Private Call, Group Call, Text Message and Alert Call	NA		NA		NA		NA			Support		Support		Support		NA	
Wireless Audio	Support wireless audio accessories	NA		NA		NA		External adapter			External adapter		NA		Build-in		External adapter	
Emergency	Radio can initiate an Emergency Call and Emergency Alarm	NA		NA		NA		Support			Support		Support		Support		Support	
Telemetry	This function could be used to remotely control or monitor radios	NA		NA		NA		Support			Support		Support		Support		Support	
Scanning	Allow the radio to listen to the communication activities on other channels	Support		Support		Support		Support			Support		Support		Support		Support	
Priority Scanning	Allow the radio to preferentially scan a specified channel	Support		Support		Support		Support			Support		Support		Support		Support	
Mixed Channel Scanning	Either analog or digital channel can be added into scan list	NA		NA		Support		Support			Support		Support		Support		Support	
Scan List Member Capacity	Maximum channel in one scan list	16		16		32		32			32		32		32		32	
Scan List Number	Maximum scan list in a radio	8		8		32		32			32		32		32		32	
Analog & Digital Mixed Channel	Allow a radio automatically detecting signal type and switching between analog and digital mode	NA		Support		NA		NA			NA		NA		NA		NA	
Rent	Set rent time for radio usage	NA		NA		NA		Support			Support		Support		Support		Support	
TOT	Time-Out Timer allows subscribers to keep transmitting in a pre-set time to prevent using a channel too long	Support		Support		Support		Support			Support		Support		Support		Support	
VOX	Voice-operated Transmit (VOX) allows users to trigger the voice transmission by voice directly	NA		Support		Support		Support			Support		Support		Support		Support	
LQO	Loudness and Quality Optimizer(LQO) allows the radio to automatically adjust the volume according to the environments	NA		NA		Support		Support			Support		Support		Support		Support	
Zone Change Voice Notification	Allow the radio to make a voice notification when changing zone	NA		Support		Support	NA	Support	NA	NA	Support	NA	Support	NA	Support	NA	Support	NA
Channel Change Voice Notification	Allow the radio to make a voice notification when changing channel	NA		Support		Support		Support			Support		Support		Support		Support	
Voice Notification Customization	The voice of notification can be customized	NA		NA		Support		Support			Support		Support		Support		Support	
Phone Interconnect	Support phone interconnection with DTMF signaling	NA		NA		NA		NA	NA[4]	Support	NA	Support	NA	Support	NA	Support	NA	Support
RFID Board	Build-in RFID board allows guard tour application	NA		NA	Support	NA		NA			NA		NA		NA		NA	
Option Board Capability	Support build-in general option board or customized board like encryption board, RFID receiver, etc.	NA		NA		NA		NA			Support		Support		Support		Support	
Third Party ADK	Application Developer Kit is available for third party partner	NA		NA		Support		Support			Support		Support		Support		Support	
Analog Features																		
Scrambling	Analog Scrambling compatible	NA		NA		Support		Support			Support		Support		Support		Support	
2 Tone Signalling	Analog 2 tone compatible	NA		NA		Support		Support			Support		Support		Support		Support	
5 Tone Signalling	Analog 5 tone compatible	NA		NA		Support		Support			Support		Support		Support		Support	
HDC1200	Analog HDC1200 compatible	NA		NA		Support		Support			Support		Support		Support		Support	
CTCSS/CDCSS	Analog CTCSS/CDCSS compatible	Support		Support		Support		Support			Support		Support		Support		Support	
CTCSS/CDCSS via Menu	CTCSS/CDCSS modified by menu	NA		NA		NA		NA	Support	Support	NA	Support	NA	Support	NA	Support	NA	Support
Vote Scan	Allow the radio to listen to communication activities on analog channels according to RSSI level	NA		NA		NA		Support			Support		Support		Support		Support	
Digital Features																		
Private Call	A call to one specific user	Support		Support		Support		Support			Support		Support		Support		Support	
Group Call	A call to a group of users on the same channel	Support		Support		Support		Support			Support		Support		Support		Support	
All Call	A call to all the users on the same channel	Support		Support		Support		Support			Support		Support		Support		Support	
ID & Alias Display	The ID and alias of a call could be shown in radio with display	Support		NA		NA	Support	NA	Support	Support	NA	Support	NA	Support	NA	Support	Support	
Contact List	Allow the user to make a contact list including Group Call, Private Call and All Call	Support (64 members)		Support (64 members)		Support (1024 members)		Support (1024 members)			Support (1024 members)		Support (1024 members)		Support (1024 members)		Support (1024 members)	
All Call Talkback In Private Mode	When receiving All Call, allow the user to talk back to the initiator in private mode	NA		NA		Support		Support			Support		Support		Support		Support	
Freeform Text Messaging	Allow the radio user to enter and send free-form text messages	NA		NA		NA		NA	Support (256 characters)		NA	Support (256 characters)	NA	Support (256 characters)	NA	Support (256 characters)	NA	Support (256 characters)
Pre-programmed Text Messaging	Radio can send pre-programmed text messages	Support (64 characters)		Support (64 characters)		Support (256 characters)		Support (256 characters)			Support (256 characters)		Support (256 characters)		Support (256 characters)		Support (256 characters)	
Basic Encryption	Apply simple algorithm based on the encryption key value (40 bits,128 bits and 256 bits) to encrypt the voice or data in end-to-end process.	NA		NA		Support		Support			Support		Support		Support		Support	
Advanced Encryption	Apply complicated algorithm. Support DMRA(ARC4, AES) and Hytera algorithm both of which support key value of 40 bits, 128 bits and 256 bits.	NA		NA		NA		Optional			Optional		Optional		Optional		Optional	
Multiple Key Encrypt & Decrypt	With advanced encryption, randomly select a key for encryption and automatically match for decryption from Encrypt Key List (up to 30 keys).	NA		NA		NA		Optional			Optional		Optional		Optional		Optional	
Lone Worker	Initiates emergency if the user does not respond to alerts in a pre-set time	NA		NA		NA		Support			Support		Support		Support		Support	
Roaming	Allow the radio to work under different site via detecting signal strength	NA		NA		Optional		Optional			Optional		Optional		Optional		Optional	
Priority Interrupt	Radio transmissions can be interrupted	NA		NA		Optional		Optional			Support		Support		Support		Optional	Support
Remote Monitor	A radio can remotely activate another radio's microphone	NA		NA		Optional		Support			Support		Support		Support		Support	
Enable & Disable	A radio can remotely disable and re-enable another radio	NA		NA		Optional		Support			Support		Support		Support		Support	
Radio Check	A radio can remotely check if another radio is on line or not	NA		NA		Support		Support			Support		Support		Support		Support	
Alert Call	A radio can send a calling alert to another radio for call-back notification	NA		NA		Support		Support			Support		Support		Support		Support	
One Touch Call/ Text Message	Only one press on programmable buttons to use a call or text message	Support		Support		Support		Support			Support		Support		Support		Support	
One Touch Supplementary Call	Only one press on programmable buttons to use Radio Check, Remote Monitor, Enable & Disable and Alert Call.	NA		NA		Support		Support			Support		Support		Support		Support	
Over The Air Programming (OTAP)	Remote, over-the-air programming via application software just like Hytera Dispatch System or Demo Software	NA		NA		Support		Support			Support		Support		Support		Support	
Talk Around	Allow the radio to use a receiving frequency to transmit when there is no repeater available or the repeater is out of range	Support		Support		Support		Support			Support		Support		Support		Support	
DMRA Direct Mode TDMA	In direct mode, true 2-slot function allows 2 talk paths on 1 frequency.	Support		Support		Support		Support			NA		NA		NA		Support	NA
Repeater Mode TDMA	In repeater mode, true 2-slot function allows 2 talk paths on 1 frequency.	Support		Support		Support		Support			Support		Support		Support		Support	
Pseudo Trunk	Pseudo Trunk can dynamically allocate a free time-slot.	NA		NA		Support		Support			Support		Support		Support		Support	
Operation Mode																		
Analog Version	Only analog conventional mode	NA		NA		NA		NA			Support[5]		NA		NA		NA	Support
Analog & Digital Conventional Mode	Dual modes	Support		Support		Support		Support			Support		Support		Support		Support	
MPT-1327 Trunking	MPT-1327 analog trunking system with dedicated control channel	NA		NA		NA		NA			Support to upgrade		Support to upgrade		Support to upgrade		NA	Support to upgrade
XPT Trunking	Channel assignment managed by system without control channel	NA		NA		NA		Support			Support		Support		Support		Support	
DMR Trunking Lite	Hytera DMR Tier-3 trunking system with dedicated control channel	NA		NA		NA		NA			Support to upgrade		Support to upgrade		Support to upgrade		NA	Support
DMR Trunking Pro	Hytera DMR Tier-3 trunking system with dedicated control channel	NA		NA		NA		NA			Support to upgrade		Support to upgrade		Support to upgrade		NA	Support
DMR Simulcast System	DMR simulcast system with voting center	Support		Support		Support		Support			Support		Support		Support		Support	
Certificates																		
Intrinsic Safety Certificates	Certificates for use in potentially explosive environments	NA		NA		NA		NA			UL913, CSA		ATEX (ib IIC), FM, CSA, IECEx		NA	UL913, CSA	NA	
General Certificates	CE, FCC, IC, MIL-STD	CE, FCC, IC, MIL-STD-810 C/D/E/F/G Standard																

① Not available for radios with UL913 Intrinsically Safe

② Only for DMR Tier III Trunking mode now. In firmware version R7.5, DMR conventional mode and XPT trunking are available in 806-941MHz.

③ Mandown function is supported with UL913 model

④ In firmware version R7.5, Phone Interconnect function will be supported via default Tel contact list.

⑤ Analog version is not available with UL913 model

⑥ Interated GLONASS is not available with UL913 model

⑦ X1p(UL913) only supports 1400mAh battery

Hytera retains the right to make changes at any time without notice. Availability is subject to individual country law and regulations.

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