

# Ordering Guide

PDR8000 – Portable Digital Repeater

Revision 1.5

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## Ordering Instructions – PLEASE READ CAREFULLY

If only ordering spares or accessories, proceed to step 6. If only ordering services, proceed to section 7.

1. Select PDR8000 Frequency type (Section 1). NOTE: PDR8000 Frequency type model provides a repeater, power supply and AC and Unterminated DC Cables. (USB Programming cable not included refer to DDN9025)
2. Select optional features if applicable to your intended operation (Section 2).
3. For full duplex operation, select the appropriate duplexer option (Section 3). NOTE the frequency requirements can be found in Section 3 to ensure your frequency plan meets the operating requirements. Duplexer is not mandatory and the 'No Duplexer' option can be chosen when full duplex capability is not desired.
4. Select suitcase color options (Section 4).
5. Select required antennas (Section 5).
6. Select spares (Section 6).
7. Select optional services as required (section 7).

## Important Notes

1. Only the frequency bands shown in Section 3 are available as standard configurations. For custom filtering, please contact Futurecom: [sales@futurecom.com](mailto:sales@futurecom.com)
  - 1 Transmit and 1 Receive frequency are required for ordering. Units will be factory tuned to these frequencies so accuracy is important.
2. Standard PDR8000 delivery time is 10-12 weeks from the time the order is placed and the frequency information is provided. Frequency information must be accurate and in accordance with the frequency plan requirements described in this document in order to avoid delays.
3. Duplexer is not mandatory and the 'No Duplexer' option can be chosen when full duplex capability is not desired.
4. PDR8000 models include standard AC & DC Power Cables.
5. For all sales inquiries, please contact Futurecom sales at [sales@futurecom.com](mailto:sales@futurecom.com).
6. All pricing for the PDR8000 can be found in Motorola P-CAT or MOL.
7. Programming software is available for download at <http://futurecom.com/support/documentation-software/>

# 1.PDR8000 Frequency Type

## PDR8000 136-174 MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT3148A</b>	<b>Base Order Code</b>  <b>PDR8000 – VHF</b>	VHF repeater, power supply and AC and DC Cables, Display with Local Channel Change		Wireline Connections; see section 2 for wireline connections options

## PDR8000 380-430 MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT3149A</b>	<b>Base Order Code</b>  <b>PDR8000 - UHF 380-430 MHz</b>	UHF 380-430 MHz repeater, power supply and AC and DC Cables, Display with Local Channel Change		Wireline Connections; see section 2 for wireline connections options

### PDR8000 450-470 MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT3150A</b>	<b>Base Order Code</b>  <b>PDR8000 - UHF 450-470 MHz</b>	UHF 450-470 MHz repeater, power supply and AC and DC Cables, Display with Local Channel Change		Wireline Connections; see section 2 for wireline connections options

### PDR8000 700 MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT3152A</b>	<b>Base Order Code</b>  <b>PDR8000 – 769 MHz-775 MHz/799-805 MHz</b>	700 MHz repeater, power supply and AC and DC Cables, Display with Local Channel Change		Wireline Connections; see section 2 for wireline connections options

## PDR8000 800MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT3153A</b>	<b>Base Order Code</b>  <b>PDR8000 – 806-824/ 851-869 MHz</b>	800 MHz repeater, power supply and AC and DC Cables. Display with Local Channel Change		Wireline Connections; see section 2 for wireline connections options

## 2. Optional Features

<u>ORDER CODE</u>	<u>ITEM</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT06253AA</b>	<b>Add V.24 Wireline Operation</b>	TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Can also be added to field units as add-on functionality (Order Code: DDN2633A )
<b>TT06319AA</b>	<b>Deployment Profiles Capability</b>  If the option for Deployment Profile Capability is purchased, PDR8000 can be programmed with up to ten different Deployment Profiles, each uniquely defining the operational characteristics of the PDR8000.	TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Can also be added to field units as add-on functionality  (Order Code: DDN2634A )



### 3. Internal Duplexer Options

<u>OPTIONS</u> <u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT06261AA</b>	No Duplexer Required Option		TT3148A, TT3149A, TT3150A, TT3152A, TT3153A	
<b>TT06254AA</b>	Add Duplexer:  VHF 5 MHz TX to RX Separation  500KHz Wide Bandpass		TT3148A – PDR8000 - VHF	
<b>TT06255AA</b>	Add Duplexer:  380-430 MHz 10 MHz TX to RX Separation  100KHz Wide Bandpass		TT3149A –  PDR8000-UHF 380-430 MHz	
<b>TT06256AA</b>	Add Duplexer  380-430 MHz		TT3149A –	

	5 MHz TX to RX Separation  500KHz Wide Bandpass		PDR8000-UHF 380-430 MHz	
<b>TT06257AA</b>	Add Duplexer  450-470 MHz 5 MHz TX to RX Separation  500KHz Wide Bandpass		TT3150A –  PDR8000-UHF 450-470 MHz	
<b>TT06259AA</b>	Add Duplexer  700 MHz 30 MHz TX to RX Separation 6 MHz Wide Bandpass		TT3152A  PDR8000-700 MHz	
<b>TT06260AA</b>	Add Duplexer  800 MHz 45 MHz TX to RX Separation  10 MHz Wide Bandpass		TT3153A  PDR8000-800 MHz	



## 4. Suitcase Color Option

<u>OPTIONS ORDER CODE</u>	<u>ITEM</u>		<u>PREREQUISITES</u>	<u>NOTES</u>
<b>TT06281AA</b>	Standard: Black Suitcase		TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Zero Cost Option
<b>TT06251AA</b>	Alternative: Replaces standard black suitcase with Olive Drab Green suitcase		TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Alternative cost to Standard Black Suitcase
<b>TT06252AA</b>	Alternative: Replaces standard black suitcase with Yellow suitcase		TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Alternative cost to Standard Black Suitcase

## 5. Antennas

ANTENNAS FOR PDR8000 UNITY GAIN (0dBd), MAG MOUNT	FREQUENCY BAND [MHz]
<b>DDN9014</b>	136 – 174
<b>DDN9015</b>	380 – 520
<b>DDN9016</b>	764 – 869

## 6.PDR8000 Spares & Options Ordered Separately

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Connector Type / Cable Length</u>
<b>DDN2300A</b>	PDR8000 AC Power Cable (FC # NKPF-515-D-2)	6'
<b>DDN2301A</b>	PDR8000 DC Power Cable (FC # 7W088X11-01) for battery backup.	8'
<b>DDN2332A</b>	PDR8000 DC Power Cable (FC # 7W088X11-02) Unterminated	8'
<b>DDN2336A</b>	Battery Backup for Suitcase PDR8000 (5 hours) 	
<b>DDN2334A</b>	Spare Charger for PDR8000 Battery Backup Kit 	N/A
<b>DDN9025A</b>	PDR8000/DVR Programming Cable (FC #AK672-3-R)	USB A to USB B, 10'
<b>DDN2335A</b>	Optional - Zippered Pouch	
<b>TBD</b>	Optional Backpack Sling – Coyote Color	
<b>TBD</b>	Optional Backpack Sling – Multi Cam Color	

## Spare Duplexers

<u>ORDER CODE</u>			
	<b>DESCRIPTION</b>	<b>TX to RX SEPARATION</b>	<b>BANDPASS</b>
<b>DDN2313A</b>	Spare PDR Duplexer - VHF	5 MHz TX to RX Separation	500KHz Wide Bandpass
<b>DDN2314A</b>	Spare PDR Duplexer – UHF380-430 MHz	10 MHz TX to RX Separation	100KHz Wide Bandpass
<b>DDN2315A</b>	Spare PDR Duplexer - UHF 380-430 MHz	5 MHz TX to RX Separation	500KHz Wide Bandpass
<b>DDN2316A</b>	Spare PDR Duplexer - UHF 450-470 MHz	5 MHz TX to RX Separation	500KHz Wide Bandpass
<b>DDN2318A</b>	Spare PDR Duplexer – 700 MHz	30 MHz TX to RX Separation	6 MHz Wide Bandpass
<b>DDN2319A</b>	Spare PDR Duplexer – 800 MHz	45 MHz TX to RX Separation	10 MHz Wide Bandpass

## Add-On Functionality Software – When not ordered originally with PDR8000

<u>ORDER CODE</u>	<u>DESCRIPTION</u>
<b>DDN2633A</b>	Enable Deployment Profiles Capability
<b>DDN2634A</b>	Enable V.24

## 7. Services







<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
<b>DDN2303A</b>	PDR8000 4 Year Extended Warranty	<p>Extends standard 18 month warranty by 4 years. Includes software subscription. Can only be purchased once per unit.</p> <p>Must be purchased prior to expiration of standard warranty.</p>
<b>DDN2302A</b>	PDR8000 1 Year Extended Warranty	<p>Extends existing warranty by one year. Includes software subscription.</p> <p>Must be purchased prior to expiration of any existing warranty. Standard 18 month warranty can be extended by a maximum of 4 years.</p>
<b>DDN1971A</b>	On-Site Technical and Programming Support (BASIC)	<p>Maximum 1 day; see EXTENDED support for additional days.</p> <p>Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only.</p>
<b>DDN1972A</b>	On-Site Technical and Programming Support (EXTENDED)	

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
		Must purchase BASIC on-site technical and programming support. All on-site activity must be scheduled as sequential days.
<b>DDN1973A</b>	Technical and Programming Phone Support	Must be purchased in 1hr increments.
<b>DDN1974A</b>	<p>On-Site Training (BASIC) 2 Courses Available:</p> <p><b>1. Training the Trainer/end user</b></p> <p>1 Day (Est 4 hours) end user training gives the end user a general understanding of Futurecom solutions through your agencies particular use case, highlighting best practices through situations commonly seen in the field during deployment situations. Participants will have hands on training with the newly implemented solution for practical operation and control.</p> <p><b><u>OR</u></b></p> <p><b>2. Technical and Programming Training</b></p> <p>1 Day Technical and Programming training gives the radio technician an in depth understanding on how the DVRS/VRX1000/PDR8000 is integrated into the everyday operation of the agency. Highlighting code plug compatibility, Tweaker software functionality and programming for optimal end user experience.</p>	<p>Maximum 1 day; see EXTENDED training for additional days.</p> <p>Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only.</p> <p>Training the trainer requires the newly implemented DVRS/VRX1000/PDR8000 to be tested and in use on the network to get the most out of the Training the Trainer.</p> <p>Standard training package. Includes soft copy of training materials. Customized training available subject to content and price negotiation.</p> <p>Contact Futurecom Systems Group, ULC for a pre-training checklist to insure your solution is ready for Basic On-site Training</p> <p>Technical and Programming Training, Futurecom Systems Group, ULC requires at least two full functioning Portable radios (PSUs) programmed to the current system, at least one installed</p>



<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
		DVRS/VRX1000/PDR8000. For DVRS and VRX1000 use a Mobile Radio (MSU) radio set is required to conduct this training properly.
<b>DDN1975A</b>	On-Site Training (EXTENDED)	Must purchase BASIC on-site training All on-site activity must be scheduled as sequential days.

## 8. Suitcase Comparison Chart Reference

		
	Suitcase Trunking/Conventional Extension DVRS	Suitcase with V.24 Extension PDR8000
Size (W,H,D)	20.6" x 17" x 8.6"	19.2" x 15.2" x 7.3"
Frequency Band	VHF, UHF, 700 MHz, 800 MHz	VHF, UHF, 700 MHz, 800 MHz
Power Output	10 Watts	20 Watts
Weight	50 lbs.	27.4 lbs.
AC/DC Power	YES	YES
Transmit Duty Cycle	Continuous	50 % - Closed Case Continuous - Open Case
Analog Conventional Operation	YES	YES <sup>*note 1</sup>
P25 Digital Conventional Operation	YES	YES
Field Swapable Duplexer	NO	YES
Battery Source	External	External
Network Connection Type	APX MOBILE	WIRELINE
Closed Case Operation	NO	YES
Standard Case Colors		
Optional Case Colors		
Backpack Sling (Optional)	YES	YES
Battery Pack (Optional)	YES	YES
50 Watt Booster Pack (Optional)	NO	YES (Available Soon)

Note 1 - Analog operation is only available in local repeat mode

## Revision History

<b>REVISION</b>	<b>DATE</b>	<b>NOTES</b>
1.1	2017-06-30	<p>Added No Charge Standard Black Suitcase – TT06281A,            Added the following Spares:            DDN2332A- Spare PDR8000 DC Cable            DDN2333A – Spare PDR8000 Auxiliary Cable            DDN2334A – Spare Charger for PDR800 Battery Backup (5 Hrs.)            DDN2335A – Zippered Accessory Pouch            DDN2336A – Battery Backup for PDR8000            DDN2313A – Spare VHF Duplexer            DDN2314A – Spare 380-430 MHz UHF Duplexer (10 MHz Separation)            DDN2315A – Spare 380-430 MHz UHF Duplexer (5 MHz Separation)            DDN2316A – Spare 450-470 MHz UHF Duplexer            DDN2317A – Spare 470-512 MHz UHF Duplexer            DDN2318A – Spare 700 MHz Duplexer            DDN2319A – Spare 800 MHz Duplexer            Added Suitcase comparison chart</p>
1.2	2017-11-15	Removed DDN2333A – Spare PDR8000 Auxiliary Cable
1.3	2018-05-16	<p>Changed description for TT3148A, TT3149A, TT3150A, TT3151A, TT3152A, TT3153A –            Added Display with local channel change            Changed Section 2 title from wireline connection to optional features.            Added Bandpass Requirements for Duplexers            Removed UHF 470-512 MHz PDR8000, Remove TT06258AA Duplexer, Remove            DDN2317A Spare Duplexer, Added Optional Backpack Sling, Updated Suitcase            Comparison Chart, Software Options</p>
1.4	2018-07-30	Updated Product Picture on Cover Page
1.5	2018-12-19	Updated Training Description