

Ordering Guide

PDR8000® – Portable Digital Repeater

Revision 2.9

September 8, 2022



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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 optional 50W Booster Pack (section 6)
7. Select spares (Section 7).
8. Select optional services as required (section 8).

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

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.
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/>
8.  Subscribe to our newsletter if you want to be informed about new releases and updates. Please visit <http://futurecom.com/support/newsletter/>



Frequency plans that do not meet Futurecom's specified frequency separation are custom orders. Please contact Futurecom to determine if custom frequency plan is viable and for quotations on viable plans. sales@futurecom.com

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1.PDR8000® Frequency Type

PDR8000® 136-174 MHz

<u>ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
TT3148A	Base Order Code PDR8000® – VHF	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>
TT3149A	Base Order Code PDR8000® - UHF 380-430 MHz	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>
TT3150A	Base Order Code PDR8000® - UHF 450-470 MHz	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>
TT3152A	Base Order Code PDR8000® – 769 MHz-775 MHz/799- 805 MHz	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>
TT3153A	Base Order Code PDR8000® – 806-824/ 851-869 MHz	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>
TT06253AA	Add V.24 Wireline Operation	TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Can also be added to field units as add-on functionality (Order Code: DDN2633A)
TT06319AA	Deployment Profiles Capability 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)

<u>ORDER CODE</u>	<u>ITEM</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
TT06582AA	Add DFSI Operation: Provides P25 standard IP wireline fixed station interface.	TT3148A or TT3149A or TT3150A or TT3152A or TT3153A	Can also be added to field units as add-on functionality (Order Code: DDN3285A) DFSI Protocol Version 1 on the Ethernet interface. Analog operation (or Mixed-mode operation) is supported on Ethernet (DFSI) interface.

3. Internal Duplexer Options



Frequency plans that do not meet Futurecom's specified frequency separation are custom orders. Please contact Futurecom to determine if a custom frequency plan is viable and for quotations on viable plans.

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<u>OPTIONS ORDER CODE</u>	<u>ITEM</u>	<u>INCLUDES</u>	<u>PREREQUISITES</u>	<u>NOTES</u>
TT06261AA	No Duplexer Required Option		TT3148A, TT3149A, TT3150A, TT3152A, TT3153A	
TT06254AA	Add Duplexer: VHF 5 MHz TX to RX Separation		TT3148A – PDR8000® - VHF	

	500KHz Wide Bandpass			
TT06255AA	Add Duplexer: 380-430 MHz 10 MHz TX to RX Separation 100KHz Wide Bandpass		TT3149A – PDR8000®-UHF 380-430 MHz	
TT06256AA	Add Duplexer 380-430 MHz 5 MHz TX to RX Separation 500KHz Wide Bandpass		TT3149A – PDR8000®-UHF 380-430 MHz	
TT06257AA	Add Duplexer 450-470 MHz 5 MHz TX to RX Separation 500KHz Wide Bandpass		TT3150A – PDR8000®-UHF 450-470 MHz	
TT06259AA	Add Duplexer 700 MHz 30 MHz TX to RX Separation		TT3152A PDR8000®-700 MHz	

	11 MHz Wide Bandpass			
TT06260AA	Add Duplexer 800 MHz 45 MHz TX to RX Separation 10 MHz Wide Bandpass		TT3153A PDR8000®-800 MHz	
CUSTOM FILTERS				
TT06579AA	ENGINEERING DESIGN TIME – Non-Recurring Engineering Fee (NRE)			
TT06580AA	CUSTOM FILTER DESIGN – TIER 1 (Per Unit) This option is for a custom filter design and must be ordered if frequency plans do not meet Futurecom's specified frequency separation stated in the ordering guide. In order to determine if a custom frequency plan is viable, please contact sales@futurecom.com prior to placing an order.			
TT06581AA	CUSTOM FILTER DESIGN – TIER 2 (Per Unit) This option is for a custom filter design and must be ordered if frequency plans do not meet Futurecom's specified frequency separation stated in the ordering guide. In order to determine if a custom frequency plan is viable, please contact sales@futurecom.com prior to placing an order.			

4. Suitcase Color Option

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

5. Mag Mount Antennas

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

6. Booster Pack

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes</u>
DDN2732A	VHF PDR8000® Booster Pack	
DDN2733A	UHF 380-430 MHz PDR8000® Booster Pack	Not available for Sale in Canada
DDN2734A	UHF 450-470 MHz PDR8000® Booster Pack	Not available for Sale in Canada
DDN2735A	700/800 MHz PDR8000® Booster Pack	Not available for Sale in Canada

7. PDR8000® Spares & Options Ordered Separately

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Connector Type / Cable Length</u>
DDN2300A	PDR8000® AC Power Cable (FC # NKPF-515-D-2)	6'
DDN2301A	PDR8000® DC Power Cable (FC # 7W088X11-01) for battery backup.	8'
DDN2332A	PDR8000® DC Power Cable (FC # 7W088X11-02) Unterminated	8'

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Connector Type / Cable Length</u>
DDN2336A	Battery Backup for Suitcase PDR8000® (5 hours) 	
DDN2334A	SPARE CHARGER FOR DVR-LX® / PDR8000® BATTERY BACK UP 	N/A
DDN9025A	PDR8000®/DVR Programming Cable (FC #AK672-3-R)	USB A to USB B, 10'
DDN2333A	PDR8000 Auxiliary Cable (FC #7W088X12-01) Provides control between the PDR8000® and a Booster Pack	
DDN2335A	Optional - Zippered Pouch	

Spare Duplexers



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<u>ORDER CODE</u>			
	DESCRIPTION	TX to RX SEPARATION	BANDPASS
DDN2313A	Spare PDR8000® Duplexer - VHF	5 MHz TX to RX Separation	500KHz Wide Bandpass
DDN2314A	Spare PDR8000® Duplexer – UHF380-430 MHz	10 MHz TX to RX Separation	100KHz Wide Bandpass
DDN2315A	Spare PDR8000® Duplexer - UHF 380-430 MHz	5 MHz TX to RX Separation	500KHz Wide Bandpass
DDN2316A	Spare PDR8000® Duplexer - UHF 450-470 MHz	5 MHz TX to RX Separation	500KHz Wide Bandpass
DDN2318A	Spare PDR8000® Duplexer – 700 MHz	30 MHz TX to RX Separation	11 MHz Wide Bandpass
DDN2319A	Spare PDR8000® 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>
DDN2633A	Enable Deployment Profiles Capability
DDN2634A	Enable V.24

<u>ORDER CODE</u>	<u>DESCRIPTION</u>
DDN3285A	PDR8000® DFSI CAPABILITY - DFSI Protocol Version 1 on the Ethernet interface. Analog operation (or Mixed-mode operation) is supported on Ethernet (DFSI) interface.

8. Services

Futurecom's standard hardware warranty is 18 months starting from the date the product ships from Futurecom. Please reference Futurecom's Terms and Conditions of Sale, Section 7 regarding standard hardware warranty <https://www.futurecom.com/terms-and-conditions/>

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
DDN2303A	PDR8000® 4 Year Extended Hardware Warranty	Extends standard 18 month hardware warranty by 4 years. Can only be purchased once per unit. Must be purchased prior to expiration of standard hardware warranty.
DDN2302A	PDR8000® 1 Year Extended Hardware Warranty	Extends existing hardware warranty by one year. Must be purchased prior to expiration of any existing hardware warranty. Standard 18 month warranty can be extended by a maximum of 4 years.

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
DDN1971A	On-site and/or Virtual Programming Support (Basic)	Maximum 1 day; see EXTENDED support for additional days. Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only.
DDN1972A	On-site and/or Virtual Programming Support (Extended)	Must purchase BASIC virtual technical and programming support.
DDN1974A	On-site and/or Virtual Training (BASIC) 2 Courses Available: 1. Training the Trainer/end user 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. <u>OR</u> 2. Technical and Programming Training 1 Day Technical and Programming training gives the radio technician an in depth understanding on how the DVR-LX®/VRX1000/PDR8000® is integrated into the	Maximum 1 day; see EXTENDED training for additional days. Minimum 2 weeks advance notice required however subject to resource availability. Applies to North America only. 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. Standard training package. Includes soft copy of training materials. Customized training available subject to content and price negotiation.

<u>ORDER CODE</u>	<u>DESCRIPTION</u>	<u>Notes and Conditions</u>
	everyday operation of the agency. Highlighting code plug compatibility, Futurecom Repeater Configurator (FRC) software functionality and programming for optimal end user experience.	Contact Futurecom Systems Group, ULC for a pre-training checklist to insure your solution is ready for Basic virtual Training 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 DVR-LX®/VRX1000/PDR8000®. For DVRS and VRX1000 use a Mobile Radio (MSU) radio set is required to conduct this training properly.
DDN1975A	On-site and/or Virtual Training (EXTENDED)	Must purchase BASIC virtual training

9. Suitcase Comparison Chart Reference



	Suitcase Trunking/ Conventional Extension DVRS	Suitcase with V.24 or Ethernet IP 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.	27.8 lbs.
AC/DC Power	YES	YES
Transmit Duty Cycle	Continuous	50 % - Closed Case Continuous - Open Case
Analog Conventional Operation	YES	YES ^{Note 1}
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		
Battery Pack (Optional)	YES	YES
50 Watt Booster Pack (Optional)	NO	YES

Note 1 - Repeater operation is only available in local repeater mode

Revision History

REVISION	DATE	NOTES
1.1	2017-06-30	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 PDR8000® 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
1.2	2017-11-15	Removed DDN2333A – Spare PDR8000® Auxiliary Cable
1.3	2018-05-16	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
1.4	2018-07-30	Updated Product Picture on Cover Page
1.5	2018-12-19	Updated Training Description
1.6	2019-05-27	Pg 4 - Special Notice regarding Frequency plans that do not meet Futurecom's specified frequency separation are custom orders
1.7	2019-06-05	Pg 14 – Added new order codes for optional Backpack Sling / Added New Section 6 – Booster Pack Section / Updated suitcase comparison chart
1.8	2019-08-01	Added Registered Trademark to cover page
1.9	2019-10-30	Remove order code DDN1973, TT06259AA & DDN2318A – Changed Description to 11 MHz Duplexer, Add DDN2333A PDR8000 Auxiliary Cable
2.0	2020-02-18	Updated Suitcase Comparison Chart
2.1	2020-06-11	Pg 14 - Updates to Order Code DDN2333A, DDN2335A, DDN2885A, DDN2886A
2.2	2020-08-27	Pg 17 – changed description of tweaker to Futurecom Repeater Configurator (FRC), all on-site training description changed from on-site to virtual
2.3	2021-05-07	Updated Training descriptions, removed backpack sling, updated description on spare battery charger, updated description for booster pack availability in Canada
2.4	2021-05-27	Updated Warranty description, updated suitcase comparison chart
2.5	2021-11-16	Added DFSI Capability at time of order or as field upgrade
2.6	2022-11-22	Updated warranty
2.7	2022-01-21	Removed olive drab case option, updated suitcase comparison chart
2.8	2022-02-28	Updated notice regarding custom filters

