



A Long-Range, Over-The-Air Radio Waveform Analyzer

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## DX-2002 Series Instrument Product Sheet

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The DiagnostX™ DX-2002 Series instrument is a long-range, Over-the-Air radio waveform analyzer that measures a radio's alignment and operating characteristics in real-time without user intervention or impact on the radio system.

### DX-2002 Series Features

- Monitors the Base Station Receive Control Channel (Inbound) Frequency
  - Protocols: P25 Trunked and P25 Conventional, Legacy, DMR, NXDN and TRBO
  - Encryption: AES-256
  - P25 System Metrics:
    - RF Frequency Error
    - Symbol Frequency Error 600 and 1800
    - Modulation Fidelity
    - Average Symbol Deviation
    - Emission Mask Conformance
    - BER, RSSI, and SNR
  - Available Frequency Bands: VHF 136-174; UHF 380-430; UHF 450-470; UHF 470-512; 700; 800; 900 MHz
  - Installation: Two (2) connections - universal AC power and an antenna.  
Can connect to the Rx antenna multicoupler
  - One DX-2002 instrument can be networked with up to three (3) NX-200 remote receivers to provide system-wide coverage. All data is stored in a unified database accessed through the DiagnostX Viewer (DV).
  - Autonomous - DiagnostX is non-intrusive and has no impact on the LMR network
  - Optional DiagnostX Viewer (DV) licenses can be installed on any computer on the network
  - User-defined thresholds can be changed on the fly at any time
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## DX-2002 Specifications

<b>DIMENSIONS</b>	2U	3.46" H x 19" W x 18.9" D
<b>WEIGHT</b>	~ 27 lbs.	
<b>POWER</b>	AC Voltage	100-240VAC @50-60Hz
<b>NETWORK CONNECTIVITY</b>	RJ45	Gigabit Ethernet
<b>PERIPHERALS</b>	USB and PS2	* Mouse and Keyboard

\* Not Supplied

<b>DX-2002a</b>	Single Protocol, Single Frequency Band
<b>DX-2002b</b>	Single Protocol, Dual Frequency Band
<b>DX-2002c</b>	Dual Protocol, Single Frequency Band
<b>DX-2002d</b>	Dual Protocol, Dual Frequency Band

## DiagnostX Viewer (DV) Report Sorted by Radio ID

Radio Id	Alias	Dept Name	RF Carrier Frequency Error (Hz)	Symbol Frequency Error 600	Symbol Frequency Error 1800	Modulation Fidelity	Average Symbol Deviation (Hz)	Status	Date/Time
9	9		63	1	9	2.48%	1804	PASSED	10/13/2020 1:10 PM
10	10		383	1	9	2.50%	1804	FAILED	10/13/2020 1:10 PM
11	11		66	1	9	2.52%	1804	PASSED	10/13/2020 1:10 PM
12	12		0	0	0	0.00%	0	NOT ENOUGH EV...	10/13/2020
13	13		393	1	9	2.56%	1804	FAILED	10/13/2020 1:10 PM
14	14		70	1	9	2.57%	1804	PASSED	10/13/2020 1:10 PM
15	15		72	1	9	2.60%	1804	PASSED	10/13/2020 1:10 PM
16	16		74	1	9	2.61%	1804	PASSED	10/13/2020 1:10 PM
17	17		74	1	9	2.63%	1804	PASSED	10/13/2020 1:10 PM
18	18		76	1	9	2.65%	1804	PASSED	10/13/2020 1:10 PM
19	19		78	1	9	2.67%	1804	PASSED	10/13/2020 1:10 PM
20	20		79	1	9	2.69%	1804	PASSED	10/13/2020 1:10 PM
21	21		81	1	9	2.71%	1804	PASSED	10/13/2020 1:10 PM
22	22		83	1	9	2.74%	1804	PASSED	10/13/2020 1:10 PM
23	23		429	1	9	2.75%	1804	FAILED	10/13/2020 1:10 PM
24	24		0	0	0	0.00%	0	NOT ENOUGH EV...	10/13/2020
25	25		87	1	9	2.79%	1804	PASSED	10/13/2020 1:10 PM
26	26		0	0	0	0.00%	0	NOT ENOUGH EV...	10/13/2020
27	27		442	1	9	2.82%	1804	FAILED	10/13/2020 1:10 PM
28	28		0	0	0	0.00%	0	NOT ENOUGH EV...	10/13/2020
29	29		92	1	9	2.85%	1804	PASSED	10/13/2020 1:10 PM
30	30		0	0	0	0.00%	0	NOT ENOUGH EV...	10/13/2020
31	31		96	1	9	2.90%	1804	PASSED	10/13/2020 1:10 PM
32	32		98	1	9	2.92%	1804	PASSED	10/13/2020 1:10 PM
33	33		463	1	9	2.93%	1804	FAILED	10/13/2020 1:10 PM
34	34		100	1	9	2.95%	1804	PASSED	10/13/2020 1:10 PM
35	35		102	1	9	2.97%	1804	PASSED	10/13/2020 1:10 PM
36	36		104	1	9	2.98%	1804	PASSED	10/13/2020 1:10 PM
37	37		479	1	9	3.00%	1804	FAILED	10/13/2020 1:10 PM

All models include an antenna, a multicoupler cable, and a one-year manufacturer warranty.

Contact LocusUSA for more information or a quote at (888) 212-9117 (Toll-Free) or [sales@locususa.com](mailto:sales@locususa.com).

### Patent Nos.

United States: #8,565,096, #8,600,371, #8,825,042, #8,948,022, #9,282,482, #9,432,866, #9,681,321, #9,743,302, #9,961,578, #10,200,902, #10,244,417, #10,609,585, #10,659,982  
 Australian: #2010235881, #2012253596 #2015203442 • Canadian: #2,746,238 • European: EP 2707798 B1 • Other patents pending.

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