

	iRay奕瑞	Document NO.	202-501-01
		Version	A0
	NDT1717MA Wireless Portable Digital FPD Product Specification	Revision Date	2022-01-27
		Page	1/6

# NDT1717MA Wireless Portable Digital FPD Product Specification

**Author** : JINLEI.ZHENG

**Status** : Authorized

**Project** : 288/NDT1717MA

	<b>iRay奕瑞</b>	Document NO.	202-501-01
		Version	A0
	NDT1717MA Wireless Portable Digital FPD Product Specification	Revision Date	2022-01-27
		Page	2/6

## Contents

1. Introduction .....	3
2. Features and Benefits .....	3
3. General Technique Specifications .....	3
4. Mechanical .....	4
5. Communications.....	5
6. Environmental and Reliability.....	5
7. Power.....	6

	iRay奕瑞	Document NO.	202-501-01
		Version	A0
	NDT1717MA Wireless Portable Digital FPD Product Specification	Revision Date	2022-01-27
		Page	3/6

## 1. Introduction

NDT1717MA is an innovative a-Si wireless portable static digital flat panel detector designed specifically for security applications.

## 2. Features and Benefits

- Reliable irradiation-resistant a-Si TFT image sensor
- 430mm x 430mm effective imaging area
- 100um pixel size
- 16-bit data output
- Max. X-ray Energy 160kV
- IP56 dust and water proof
- 8mm dead space
- 6 hours battery capacitance
- Binning 1x1, 2x2, 3x3, 4x4
- Compact structure design, only 15mm thickness and less than 4kg weigh
- Wired:1Gbps; WIFI: 802.11, 2.4G/5G

## 3. General Technique Specifications

Sensor technology	a-Si TFT
Scintillator	CsI
Active area	430mm × 430mm
Pixel pitch	100μm
Effective pixel matrix	4300 x 4300

	<b>iRay奕瑞</b>	Document NO.	202-501-01
		Version	A0
	<b>NDT1717MA Wireless Portable Digital FPD Product Specification</b>	Revision Date	2022-01-27
		Page	4/6

AD Conversion	16 bit
X-ray Energy	40kV-160kV
Image acquisition time	Preview Image Time: Typ.3s@500ms exposure window Full Image Time: Typ.5s@500ms exposure window
Maximum Frame Rate	1fps, 1x1 4fps, 2x2 10fps, 3x3 16fps, 4x4
Data\Signal interface	Wired: GigE; WIFI: 802.11 a/b/g/n/ax
Trigger mode	Software, AED
Acquisition mode	ClearAcq/Continuous/AED
Battery discharge time	6 hours (90s cycle) @Software mode 3 hours (90s cycle) @AED mode
Cooling	Passive cooling
Pre-processing	Clean image with Offset, Gain and Defective pixel Correction.

## 4. Mechanical

Weight	4kg (including battery)
Housing material	Aluminum with carbon fiber laminate entrance window
Dimension (mm)	460 (L) × 460 (W) × 15 (H).
Dead space (mm)	8

	<b>iRay奕瑞</b>	Document NO.	202-501-01
		Version	A0
	NDT1717MA Wireless Portable Digital FPD Product Specification	Revision Date	2022-01-27
		Page	5/6

Ingress protection	IP56
Handle	Removable
Color	Black

## 5. Communications

Data/Signal interface	GigE(Wired mode)  2.4G and 5G@IEEE802.11a /b/g/n/ax (Wireless mode)
X-ray trigger module	Integrated AED automatic induction exposure trigger module
Recommended Computer	OS: Windows 7, 32/64 bits, or higher  CPU: Intel Core I7 or higher  Internal Memory: 16G DDR or higher  Hard Disk: 320G or higher  Monitor resolution: 1280x1024 or higher
Software	The software release includes “iDetector”, a basic application for detector calibration, detector configuration, image acquisition, image pre-processing and viewing on an end-user workstation running the Windows operation system.

## 6. Environmental and Reliability

Temperature	-10 – 50 °C (operating, internal power supply: battery)  -20 – 50 °C (operating, external power supply: power adapter)  -20 – 60 °C (storage and transport)
Humidity	5 – 90% RH (operating, non-condensing)  5 – 95%RH (storage and transport)

	<b>iRay奕瑞</b>	Document NO.	202-501-01
		Version	A0
	NDT1717MA Wireless Portable Digital FPD Product Specification	Revision Date	2022-01-27
		Page	6/6

Altitude	3000m
Pressure	700 – 1060mbar (operating and storage and transport)

## 7. Power

AC power Supply	100-240V AC and mains frequency of 50Hz and 60Hz, both +/- 2%.
DC power Input	Default 24V, Permitting the input range from 12 to 28V
Battery charging time	≤ 3h
Dissipation	≤ 20W(operating) ≤ 32W(operating and charging)