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# Single Tube 2D Code Readers Overview

PRODUCT	XTR-1	XTR-1 PRO	XTR-1 ELITE	XTR-1 ELITE BT
CATALOG NO	20-1001	20-1010	20-1003	20-1008
SCAN AND DECODE TIME (seconds)	1	1	1	1
DIMENSIONS (mm)	77 x 100 x 100	125x 100 x 95	61 x 167 x 41.2	
KEYBOARD WEDGE	$\checkmark$	$\checkmark$	√	$\checkmark$
CONFIGURE OUTPUT TEXT	$\checkmark$	1	√	$\checkmark$
WINDSOCK CLIENT	x	1	x	x
WINDSOCK SERVER	x	1	x	x
CP/IP REMOTE CONTROL	x	$\checkmark$	x	х
INEAR SQL QUERY	x	$\checkmark$	х	х
INEAR BARCODE	x	$\checkmark$	√	$\checkmark$
COMPATIBILITY	All	All	All	All
CABLE	USB	USB	USB	USB
EXTERNAL POWER	х	$\checkmark$	x	x
/IRTUAL RS232 COM PORT	x	x	x	√

# Whole Rack 2D Code Readers Overview

PRODUCT	XTR-96	XTR-96 FLEX	XTR-96 CRYO	XTR-96 LF CRYO	XTR-96 PRO	XTR-384 PRO
CATALOG NO	20-2002	20-2102	20-2105	20-2106	20-3101	20-2102
BASIC SPECIFICATIONS						
MAGING TECHNOLOGY	CCD	CCD	CCD	CCD	CAMERA X8	CAMERA X8
DECODE TIME	2 SECS	2 SECS	2 SECS	2 SECS	1 SEC	1 SEC
SCAN TIME	8 SECS	8 SECS	8 SECS	15 SECS	1 SEC	1 SEC
DIMENSIONS (mm)	291 X 175 X 71	291 X 175 X 71	291 X 175 X 71	440 X 300 X 68	207 X 184 X 84	207 X 184 X 84
SOFTWARE COMPATIBILITY						
WINDOWS XP	1	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
WINDOWS 7 32 BIT	√	✓	$\checkmark$	√	Х	Х
WINDOWS 7 64 BIT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Х	Х
CONNECTION	USB X2	USB X2	USB X2	USB X1	CUSTOM	CUSTOM
OUTPUT OPTIONS						
OUTPUT TEXT FILE	√	√	√	√	$\checkmark$	√
CONFIGURE OUTPUT FILE	$\checkmark$	√	√	√	√	$\checkmark$
EXPORT TO EXCEL	Х	1	√	√	$\checkmark$	$\checkmark$
ODBC DATABASE PUSH	Х	√	√	√	√	$\checkmark$
USER ACCOUNT INDEPENDENT	$\checkmark$	√	$\checkmark$	√	$\checkmark$	$\checkmark$
NETWORK READY	х	√	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
TCP/IP REMOTE CONTROL	Х	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
DIRECT LINK TO EASYTRACK	Х	√	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
AUTORUN READ AND CLOSE (DRIVELESS INTEGRATION)	$\checkmark$	~	~	~	$\checkmark$	$\checkmark$
RACK AND TUBE COMPATIBILITY						
24 RACK	x	$\checkmark$	$\checkmark$	$\checkmark$	Х	Х
48 RACK	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	х	Х
96 RACK	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$
10X10 CRYO RACK	х	Х	Х	$\checkmark$	Х	Х
384 RACK	Х	✓	✓	$\checkmark$	Х	1
FULLY CUSTOMISABLE RACK FORMAT	Х	1	$\checkmark$	√	$\checkmark$	Х
READ ALL DATAMATRIX CODES	$\checkmark$	✓	$\checkmark$	√	$\checkmark$	$\checkmark$
REMP COMPATIBLE	X	√*	√*	√*	√	√
AUTO RACK ORIENTATION	Х	√	✓	✓	$\checkmark$	√
OTHER FEATURES				· · ·	•	
NO TUBE FEATURE	Х	√	√	√	$\checkmark$	√
SINGLE TUBE READING	X	✓	✓ ✓	 ✓	×	×
RACK TEMPLATES	X	↓	✓	 ✓	X	X
ANTI-FROST SYSTEM	X	×	▼ ✓	 ✓	√	√
ROBOT GRIPPER FRIENDLY	∧	X	▼ ✓	 ✓	 ✓	 ✓
OPTIONAL LINEAR BARCODE READER	×	✓ ✓	<ul> <li>✓</li> </ul>	✓ ✓	✓	 ✓
2D RACK ID	X	✓ ✓	<ul> <li>✓</li> <li>✓</li> </ul>	✓ ✓	✓ X	× X

\* Please contact FluidX for additional information

#### XTR-1 standard single tube reader



#### Decode all 2D-coded tubes

FluidX single tube readers are compatible with tubes provided by all major manufactures in 24, 48, 96, 240 and 384 rack formats. Also suitable for use with larger capacity tubes including glass compound storage tubes, cryo tubes and biological sample tubes.

Auto learning setup for quick and easy changing between tube types.

#### Fast

All our single tube readers take less than 1 second to scan and decode.

The XTR-1 is quick and simple to install.

# Flexible data capture

Tube data can be sent to any application.

#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

#### Large window and scan area.

Tube ID displayed instantly on computer screen for identification or sample entry.

#### **Specifications**

Code formats	Datamatrix, ISO 16022, square and rectangular format ECC200, 0 to 20 grid sizes, white on black, black on white, numeric and alphanumeric
Sensor type	1/3" CCD
Light source	RLED
Read time	Less than 1 second per tube
Tube compatibility	All tubes in 24, 48, 96, 240 and 384-formats. Glass compund storage tubes, cryo tubes, biological sample tubes
Dimensions	H 77 X W 100 X D 100mm
Weight	0.25 Kg
Power requirements	5V DC 0.1A max. supplied through USB
User interface	FluidX GUI
Cable length	1.5m
Cable interface	USB 2.0
Operating system	Windows XP and Windows 7 32 and 64 bit

Catalog No	Description
20-1001	XTR-1 single tube reader for all 2D Datamatrix coded tubes.

#### XTR-1 PRO single tube reader with built-in display

#### Decode any 2D-coded tube

FluidX single tube readers are compatible with tubes provided by all major manufactures in 24, 48, 96, 240 and 384 rack formats. Also suitable for use with larger capacity tubes including glass compound storage tubes, cryo tubes and biological sample tubes.

Auto learning setup for quick and easy changing between tube types.

#### Fast

All single tube readers take less than 1 second to scan and decode.

#### Flexible data capture

All FluidX single tube readers are easy to use with a wide variety of data capture options.

Tube data can be sent to any application and linked to a spreadsheet or database (including Excel).

The FluidX unique "smart-wedge" ensures the data goes exactly where you want.

Tube data and SQL database query results are displayed on the reader to provide immediate confirmation of the sample name, volume and additional details obtained directly from database, with full support for SQL queries.

# Eluida atres pro Usrsion 21010

Data can also be sent to any application and linked to a spreadsheet or database.

1GB internal storage option is available for back-up and/or installation CD.

Reader can be moved between computers.

# Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

# Specifications

Code formats	Datamatrix, ISO 16022, square and rectangular for- mat, ECC200, 0 to 20 grid sizes, white on black, black on white, numeric and alphanumeric			
Sensor type	1/3" CCD			
Light source	R LED			
Read time	Less than 1 second per tube			
Tube compatibility	All tubes in 24, 48, 96, 240 and 384-formats. Glass compund storage tubes, cryo tubes, biological sample tubes			
Dimensions	Width125mm x depth 100mm x height 95mm			
Weight	0.25 Kg			
Power requirements	External 12V power source			
User interface	FluidX GUI, realtime video image, including Windows TCP/IP, ODBC			
Cable interface	USB 2.0			
Ambient operating temperature	5 to 50°C			
Ambient storage tem- perature	5 to 50°C			
Operating humidity (non-condensing)	10 to 90%			
Storage humidity (non-condensing)	5 TO 95%			
Operating system	Windows XP and Windows 7 (32 bit only)			



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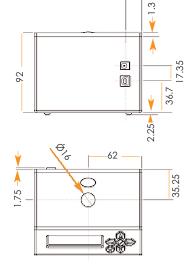
98.8

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19.3

Catalog No	Description
20-1010	XTR-1Pro
	Single tube reader for all 2D Data-Matrix labelled tubes with build in
	display and SQL Database query function.

#### XTR-1 ELITE The easiest to use single tube reader now comes with enhanced performance

The XTR-1 ELITE remains the easiest to use single tube 2D-code reader available. Simply plug into a USB port and it will be ready to read within 5 seconds!

No software installation or CPU usage. Can be used with any PC and all versions of Windows<sup>™</sup> operating systems.

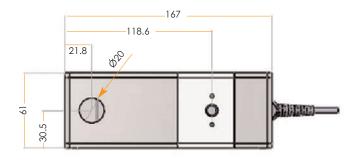
The XTR-1ELITE will send the decoded tube ID to any open application (where the cursor is placed).

#### Decode all 2D-coded tubes

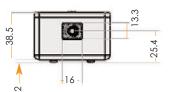
FluidX single tube readers are compatible with tubes provided by all major manufactures in 24, 48, 96, 240 and 384 rack formats. Also suitable for use with larger capacity tubes including glass compound storage tubes, cryo tubes and biological sample tubes. Auto learning setup for quick and easy changing between tube types.

#### Fast

All single tube readers take less than 1 second to scan and decode.









#### Flexible data capture

Tube data can be sent to any application.

#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

#### Specifications

Code formats	Data Matrix®, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Alphanumeric		
Sensor type	1.3 million pixel CMOS sensor		
Light source	Class 2M Visible Laser Diode at 630nm		
Read time	Less than 1 second per tube		
Tube compatibility	All tubes in 24, 48, 96, 240 and 384-formats. Glass compund storage tubes, cryo tubes, biological sample tubes		
Dimensions	Width 61mm x depth 167mm x height 41.2mm		
Weight	0.3Kg		
Power requirements	USB hub (5V)		
User interface	Keyboard wedge		
Cable interface	USB		
Ambient operating temperature	5 - 50°C		
Ambient storage temperature	-20 to- 65°C		
Operating humidity (non-condensing)	5 - 95%		
Operating system	Windows XP and Windows 7, Windows CE, MAC OSX, Linux		

Catalog No	Description
20-1003	XTR-1Elite
	Single tube reader for all 2D Data-Matrix labelled tubes, hardware
	decoding with USB connection and keyboard wedge.

# XTR-1 ELITE BT easiest to use single tube reader with enhanced performance

The easiest to use single tube 2D code reader available is now mobile. With the addition of Bluetooth the XTR-ELITE BT can identify samples anywhere, anytime, particularly useful for reading codes in remote locations.

Overcome the traditional issues of partial bluetooth connection by using unique bluetooth air cable.

#### Decode all 2D-coded tubes

FluidX single tube readers are compatible with tubes provided by all major manufactures in 24, 48, 96, 240 and 384 rack formats. Also suitable for use with larger capacity tubes including glass compound storage tubes, cryo tubes and biological sample tubes.

Auto learning setup for quick and easy changing between tube types.

#### Fast

All single tube readers take less than 1 second to scan and decode.

#### Flexible data capture

All FluidX single tube readers are easy to use with a wide variety of data capture options.

Tube data can be sent to any application and linked to a spreadsheet or database (including Excel).

The FluidX unique "smart-wedge" ensures the data goes exactly where you want.

#### Simple to integrate

ODBC connectivity allows database integration. Winsock connectivity provides instantrobotic integration.

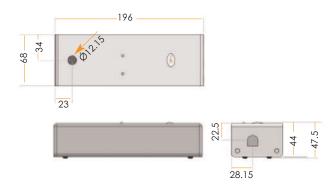
#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

Sample identification is almost instantaneous. Simply turn on to scan the tube and the tube ID is inserted into Windows Excel<sup>™</sup> on the PDA.

Further data can be added manually.

Excel spreadsheet synchronises with PC when docked. No software installation or CPU usage.





#### Specifications

Code formats	Data Matrix®, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Alphanumeric		
Sensor type	1.3 million pixel CMOS sensor		
Light source	Class 2M Visible Laser Diode at 630nm		
Read time	Less than 1 second per tube		
Tube compatibility	All tubes in 24, 48, 96, 240 and 384-formats. Glass compound storage tubes, cryo tubes, biological sample tubes.		
Dimensions	Width 65mm x depth 196mm x height 47.5mm		
Weight	0.4Kg		
Power requirements	USB hub (5V)		
User interface	Keyboard wedge		
Cable interface	USB		
Virtual com port	Virtual com prt RS232/BT		
Ambient operating temperature	5 - 50°C		
Ambient storage temperature	-20 to- 65°C		
Operating humidity (non-condensing)	5 - 95%		
Operating system	Windows XP and Windows 7, Windows CE, MAC OSX, Linux		

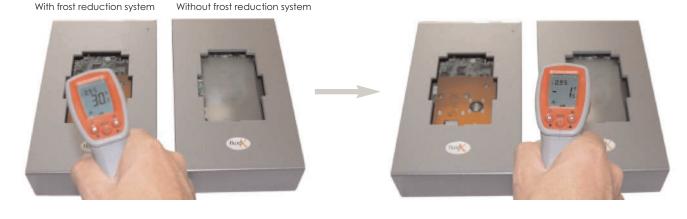
Catalog No	Description
20-1005	XTR-1Elite BT HP PDA Bluetooth and Battery enabled Single tube reader for all 2D Data-Matrix la- belled tubes, hardware decoding with HP iPAQ 214 PDA
20-1006	XTR-1Elite BT PC Bluetooth and Battery enabled Single tube reader for all 2D Data-Matrix la- belled tubes, hardware decoding with Bluetooth USB Modem, no drivers or software required.
20-1007	XTR-1Elite BT PC & PDA Bluetooth and Battery enabled Single tube reader for all 2D Data-Matrix la- belled tubes, hardware decoding with Bluetooth USB Modem, no drivers or software required and HP iPAQ 214 PDA.
20-1008	XTR-1Elite BT Modem Bluetooth USB Modem, no drivers or software required for use with XTR- 1Elite BT Edition.

The XTR-96 /384 range of whole rack 2D code readers is made up of three standard models (the XTR-96, XTR-96 FLEX and XTR-96 LF) alongside two readers which were designed to meet high throughput needs (the XTR-96 PRO and XTR-384 PRO).

The XTR-96, XTR-96 FLEX and XTR-96 LF readers use CCD imaging and sophisticated decoding methods to provide robust sample identification in just 10 seconds (total scan and decode time).

A choice of additional options are available with these models (see table below). These include an integrated linear barcode reader and cryo version which features and integrated frost reduction system that enables multiple racks to be read straight from freezer without the reliability issues that can arise due to the presence of frost or condensation.





	Standard Version	Integrated Linear Barcode Option	Cryo Model (Integrated Frost Reduction System)	Cryo Model With Integrated Linear Barcode Reader
XTR-96	Cat No 20-2002	Not available	Cat No 20-2003	Not available
XTR-96 FLEX	Cat No 20-2102	Cat No 20-2103	Cat No 20-2105	Cat No 20-2107
XTR-96 LF	Not available	Not available	Cat No 20-2106	Not available

The XTR-96PRO and XTR-384 PRO are high speed whole rack readers that can be easily integrated into automated systems, with a total scan and decode time of just 2 seconds for a rack of 96 or 384 tubes.



#### XTR-96 benchtop whole rack reader (96-format)



Compatible with all SBS format racks (24, 48, 96, 240, 384 tubes per rack)\*

#### Fast and compact

Based on a super-fast A5 high definition scanner that takes less than eight seconds to scan and decode a full rack of 96 tubes.

#### Easy to use

Simple intuitive interface enables single button scan, decode and export of results to a wide range of other applications.

#### Simple to integrate

Driverless remote use makes integration simplicity itself. Simply call the application to open, run, export and close.

#### World-class de-coding

All fluidx rack scanners use the same industry leading decoding algorithm to provide the fastest, most robust decoding available.

#### Read racks straight from freezer

Cryo option available with integrated frost reduction system for use with low temperature storage tubes, see page12 for further details.

\*System supplied with 96 format racks enabled, additional racks can be added as a cost option.

#### **Specifications**

Code formats	Data Matrix®, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Alphanumeric					
Sensor type	Colour CIS (contact image sensor)					
Light source	R, G, B LED (variable light source)					
Read time	Less than 9 seconds per rack					
Tube compatibility	All tubes in 24, 48 and 96-formats. Glass compound storage tubes, cryo tubes, biological sample tubes					
Dimensions	Width 51mm x depth 256mm x height 154mm					
Weight						
Power requirements	AC 100 -240 V +/-10%. Less than 8W					
User interface	FluidX GUI, including Windows TCP/IP, ODBC					
Cable interface	USB 2.0/ USB 1.1, USB type B					
Operating system	Windows XP and Windows 7					

Catalog No	Description
20-2002	XTR-96 Small Form Factor Whole rack reader for racks of 96 2D-labelled
	tubes. Fast reading on the bench top use.
20-2003	XTR-96 CRYO Small Form Factor Whole rack reader for racks of 96 2D-labelled
	tubes. Fast reading on the bench top use.
	With integrated frost reduction system.

#### XTR-96 FLEX a "next generation" rapid whole rack reader for desktop use with improved image quality

#### Fast and reliable

12 second total scan and decode time for rack of 96 tubes. Quick warm-up time. Excellent image quality and depth of focus.

# Compatible with all 2D barcoded tubes in 24, 48, 96 and 384 racked format.

Also suitable for use with larger tubes such as glass compound storage tubes, cryo tubes and biological sample tubes.

#### Easy to use with a wide variety of data capture options

Simple and intuitive Graphical User Interface. Results can be viewed directly or integrated with other applications, ODBC connectivity for database integration. Direct data output to Excel.

#### Automatic Rack Orientation, More Secure Tracking

FluidX racks are now supplied with a unique 2D Data Matrix code identifier. This code can be read simultaneously when using the XTR-96 FLEX to provide automatic rack orientation and more secure sample tracking.

#### "No tube" feature

Able to discriminate between tube with a barcode that cannot be decoded and a rack position with no tube.

Will not attempt to decode empty tube positions and data files are kept "clean", wasted data entry is avoided leading to faster rack reading.

#### **Rack templates**

User able to set up rack templates for applications where partially filled racks are routinely decoded, leading to faster decoding time, eliminates unwanted data.



#### Simple to integrate

ODBC connectivity allows database integration. Winsock connectivity provides instant integration. Only one USB connection is required for both power and data.

#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

#### Single tube reading

Can be a pre-set location or a user-defined position within the rack. When activated the system will decode a single tube within 8 seconds and display ID on screen, the ID can be copied to any application with a single click.

#### Read 2D codes straight from freezer

CRYO version available with integrated frost reduction system for use with low temperature storage tubes, further details on page 12.

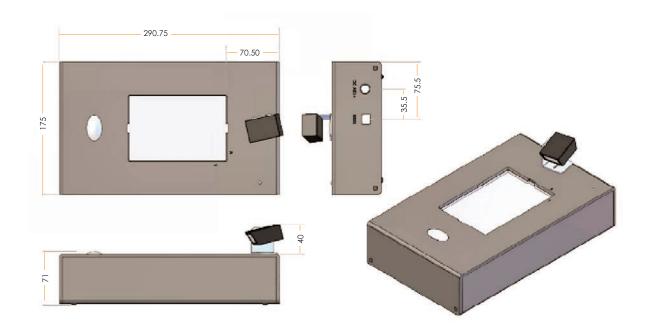
## Integrated linear bar code reader option

See ordering details on next page.

#### Specifications

Code formats	Data Matrix®, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Alphanumeric					
Sensor type	CCD image sensor					
Light source	CCFL (cold cathode fluorescent light source)					
Read time	12 seconds total scan and decode time for rack of 96 tubes					
Tube compatibility	All tubes in 24, 48, 96 and 384-formats. Glass compound storage tubes, cryo tubes, biological sample tubes					
Dimensions	Width 175mm x depth 291mm x height 71mm					
Weight	0.5kg					
Power requirements	AC 100 -240 V +/-10%. Less than 8W					
User interface	FluidX GUI, including Windows TCP/IP, ODBC					
Cable interface	USB 2.0/ USB 1.1, USB type B					
Operating system	Windows XP and Windows 7					

# XTR-96 FLEX a "next generation" rapid whole rack reader for desktop use with improved image quality



Catalog No	Description						
20-2102	XTR-96 FLEX						
	Small Form Factor Whole rack reader for racks of 48 / 96 2D labelled tubes; small-footprint scanner based solution						
	for rapid reading and integration. Suitable for all tube types.						
20-2103	XTR-96 FLEX BC						
	Small Form Factor Whole rack reader for racks of 48 / 96 2D labelled tubes; small-footprint scanner based solution						
	for rapid reading and integration. With Integrated Linear Barcode Reader for barcodes located on the A1-H1 side.						
	Suitable for all tube types.						
20-2105	XTR-96 FLEX CRYO						
	Small Form Factor Whole rack reader for racks of 48 / 96 2D labelled tubes; small-footprint scanner based solution						
	for rapid reading and integration. With Integrated frost reduction. Suitable for all tube types.						
20-2107	XTR-96 FLEX CRYO BC						
	Small Form Factor Whole rack reader for racks of 48 / 96 2D labelled tubes; small-footprint scanner based solution						
	for rapid reading and integration. With Integrated frost reduction. With Integrated Linear Barcode Reader for bar-						
	codes located on the A1-H1 side. Suitable for all tube types.						



XTR-96 LF whole rack reader compatible with traditional format racked cryotubes AND SBS format racked tubes

The first scanner designed for use with both traditional cryo format and SBS format racks.

Ideal for use with cryogenic storage racks in 10x10 and 9x9 (133mmx133mm) formats.

Can also be used with SBS format racks and 5x5 cryogenic storage racks by using an optional spacer.

#### Easy to use

Results can be viewed directly or integrated with other applications. Direct data output to Excel.

#### **Easily integrated**

Winsock connectivity enables instant robotic integration and automatic rack orientation.

#### "No tube" feature

Able to discriminate between tube with a barcode that cannot be decoded and a rack position with no tube.

Will not attempt to decode empty tube positions and data files are kept "clean", wasted data entry is avoided leading to faster rack reading.

#### Rack templates

User able to set up rack templates for applications where partially filled racks are routinely decoded, leading to faster decoding time, eliminates unwanted data.

#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

#### Specifications

Code formats	Data Matrix®, ISO 16022, Square and Rectan- gular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Al- phanumeric
Sensor type	CCD image sensor
Light source	CCFL (cold cathode fluorescent light source)
Read time	12 seconds total scan and decode time for rack of 96 tubes
Tube compatibility	All common 2D coded cryo tubes in 10x10 and 9x9 format racks (provided there is an open base for viewing the tube).
Dimensions	
Weight	0.6kg
Power requirements	AC 100 -240 V +/-10%. Less than 8W
User interface	FluidX GUI, including Windows TCP/IP, ODBC
Cable interface	USB 2.0/ USB 1.1, USB type B
Operating system	Windows XP and Windows 7



#### Simple to integrate

ODBC connectivity allows database integration. Winsock connectivity provides instant integration.

Only one USB connection is required for both power and data.

#### Read 2D Datamatrix codes straight from the freezer

Currently available in CRYO version only. This rapid whole rack reader retains all the features and benefits of the original XTR-96 FLEXI (CRYO) on which it is based. Includes the integrated frost reduction system which allows multiple racks to be read without build-up of frost or condensation on the underside of the glass.

new drawing from Robin

Catalog No	Description
20-2106	XTR-96 LF CRYO
	Large Form Factor Whole rack reader for racks of square cryo racks
	with 2D labelled tubes; includes 2 reading positions, one for 10x10 or
	9x9 square racks and a second for 5x5 square racks.

# WHOLE RACK 2D CODE READERS

#### CRYO MODELS more about the integrated frost reduction system

The storage of biological samples such as DNA, protein, blood fractions and viable cells is becoming commonplace and the need to store them at lower temperatures (e.g. -20°C, -80°C and Gas Phase Liquid Nitrogen) has resulted in reading challenges for traditional rack readers.

FluidX have developed rack readers capable of reading multiple rackswithout the build-up of frost or condensation on the underside of the glass which causes the code to become unreadable.

Standard FluidX racks readers will operate in a cold environment as low as -20°C and decoding the occasional rack of cryo tubes should not be considered an issue due to the quick read time. However, when scanning multiple racks the accumulated time the cold racks spend in contact with the reader glass causes a drop the air temperature on the underside of the glass.

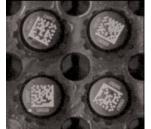
Condensation and frost can appear which results in poor reading capability and possible damage to the scanning head.



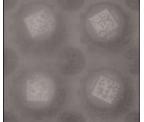
FluidX 2D coded tubes adhere to ECC200 standards and our readers employ superior decoding algorithms, however unreliable reading can occur as the condensation builds up as the code is obscured and the contrast between the code and the background is diminished.

"The new Xtr-96 with anti misting scanning window has allowed us to batch scan multiple -80 frozen racks, unlike the previous model which required scanning to be interrupted by application of a heat block to the scanning window every few racks. The ease and trouble free use has resulted in stock control and quality control being a stress free experience."

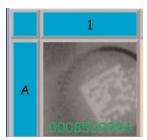
Kaetan Ladhani, CJD Resource Centre, NIBSC.



Tube image before frosting of glass surface image

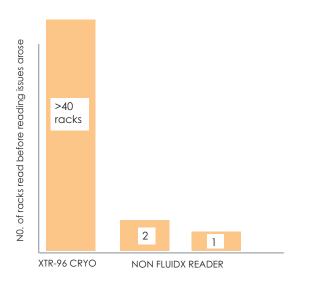


Tube image after frosting of glass surface



Decoding frosted tubes

#### Readers tested with tubes stored at -80°C



#### Standard XTR-96 v XTR-96 CRYO



XTR-96 CRYO after reading two cryo tubes stored at -80°C



Standard XTR-96 after reading two cryo tubes stored at -80°C

The XTR-96 CRYO achieves 100% decoding after reading more than 40 racks from a -20°C freezer.

#### XTR-96 PRO / XTR-384 PRO high speed whole rack reader, ideal for robotic integration



High speed whole rack reader, ideal for robotic integration. Compatible with either 96 or 384-format racked 2D-coded tubes.

# Fast

4 seconds total scan and decode time. 8 CCD cameras enable a near instant read.

#### Easy to use with a wide variety of data capture options.

Simple, intuitive Graphical User Interface, results can be viewed directly or integrated with other applications. ODBC connectivity for database integration. Direct data output to Excel.

#### **Easily integrated**

Winsock connectivity for instant robotic integration.

#### Automatic rack read and orientation

Simply place the rack on the reader and the XTR-96 PRO / XTR-384 PRO will read automatically using in-built sensors to determine rack placement.

#### Robust

Sealed reading head is IP65 rated. Resistant to water, dust and gases.

XTR-96PRO and XTR-384 PRO readers are suitable for use at low temperatures (-20°C).

#### Dependable decoding

All FluidX readers use the same industry leading decoding algorithm.

#### Simple to integrate

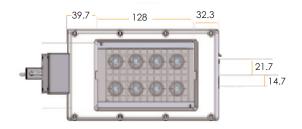
ODBC connectivity allows database integration. Winsock connectivity provides instant integration. Only one USB connection is required for both power and data.

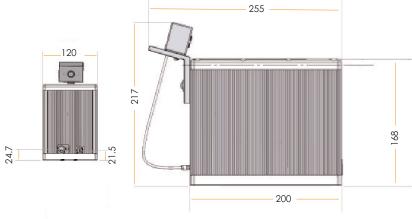
#### No tube feature

Able to discriminate between a tube with a barcode that cannot be decoded and a rack position with no tube. The system will not attempt to decode empty tube positions and data files are kept "clean" as wasted data entry is avoided, leading to faster rack reading.

Optional integrated linear barcode reader.

# XTR-96 PRO / XTR-384 PRO high speed whole rack reader, ideal for robotic integration





Dimensions for XTR-96PRO and XTR-384PRO

# Specifications

Code formats	Data Matrix®, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20grid sizes, White on Black and Black on White, Numeric and Alphanumeric
Sensor type	8x1.3 million pixel CMSO
Light source	LED
Read time	4 seconds
Tube compatibility	All tubes in 24, 48, 96 and 384-formats. Glass compound storage tubes, cryo tubes, biological sample tubes
Weight	2Kg
Power	Input: 100-240Vac Output: 12V dc, 5.0A, (60W) Operating voltage and current: Up to 12V, 0.41A
User interface	GUI
Ambient operating temperature	-20 to 50°C
Ambient storage temperature	-40 to 65°C
Operating humidity (non-condensing)	10-90%
Storage humidity (non-condensing)	5-95%
Operating system	Windows XP and Windows 7

Catalog No	Description
20-3101	XTR-96 PRO
	Whole rack reader for racks of 96 2D labelled tubes; small-footprint
	camera based solution for very rapid reading and ideal for integration
	Requires a PC running Windows XP and a Spare PC Card slot.
20-3121	XTR-384PRO
	Whole rack reader for racks of 384 2D labelled tubes; camera based
	solution for very rapid reading and ideal for integration

FluidX EasyTrack software is a graphical sample archiving package for sample management.

Provides the ability to confirm sample ID, search and retrieve samples, archive, re-array and cherry pick samples.

Easy to use and ideal for small and medium sized laboratories.

Choose one of three versions; EasyTrack Lite, EasyTrack Single, or EasyTrack Multi.

Developed and tested for use in most applications including molecular biology, cell biology, virology, microbiology, biochemistry and chemistry.

Flexible, with the ability to handle 2D sample codes. Access can be tailored to enable different groups to use the same software.

Suitable for storing and tracking both linear and 2D-coded samples, even complete boxes of tubes can be processed.

The storage environment can be customised by the user to meet specific requirements.

		EasyTrack Lite	EasyTrack Single	EasyTrack Multi	
	Cat. No.	20-9001	20-9002	20-9003	
	License type	Single	Single Install, Multi User includ- ing Multi Divisions	12 Concurrent Users across LAN, Shared data, including Multi Divisions	
	Features				
<b>,</b> []	To insert a single new sample	Yes	Yes	Yes	
Ļ	To insert multiple samples belonging to a scanned rack	Yes with Import from EasyTrack rack readers	Yes with direct EasyTrack rack reader control and import	Yes with direct EasyTrack rack reader control and import	
69	To make search using various criteria: sample ID, box ID or name	Yes, including user de- fined fields	Yes, full Boolean Logic search	Yes, full Boolean Logic search	
₽Ŀ₽Ċ	To create a child rack from an existing sample rack (or box)	No	Yes	Yes	
	To join different samples	No	Yes	Yes	
3	To delete samples	Yes	Yes both delete and remove	Yes both delete and remove	
	To reorganize racks (or box)	No	Yes	Yes	
	To import data from an external Excel file	No	Yes	Yes	
	To organize the samples into the containers (e.g. freezers)	Yes	Yes	Yes	
₩ <b>₩</b>	To display the rack contents and insert it into a container	Yes	Yes	Yes	
	To define different models of containers	Yes	Yes	Yes	
	To view the report on racks being processed and those already processed	No	Yes	Yes	
	To define and print labels with both linear and 2D barcode	No	Yes	Yes	
	To define fields' names; to create groups; to access the available utilities	Yes	Yes with pre defined values and attach files to samples	Yes with pre defined values and attach files to samples	
	To create a new user or to modify an ex- isting one.	Yes	Yes with the ability to create different access levels to perform different functions and separate divisions	Yes with the ability to create different access levels to perform different functions and separate divisions	
	To exit the program	Yes	Yes	Yes	

FluidX starter packs offer a one-stop solution for laboratories that want to implement a secure sample storage system at a competitive price.

FluidX offer a number of packages that include a wide choice of tubes, caps, 2D-code readers and manual decappers to suit most applications and budgets.

Tailored packages can also be created on request.

#### Typical starter pack includes:

XTR-1ELITE single tube reader for all 2D-Datamatrix labelled tubes.

40 racks of 96-format 2D-coded tubes, either standard or with protective jacket, or 1000 precapped cryo tubes.

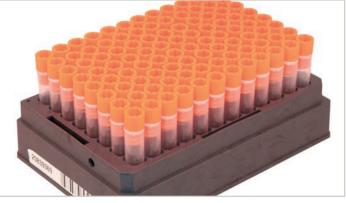
Piercable TPE septum seals or screw caps.

Manual tube decapper.

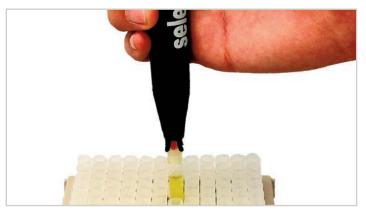
Manual single tube picker.

Deluxe packages also contain an XTR-96 benchtop whole rack reader for 2D-coded tubes or XTR-96 CRYO whole rack reader with frost reduction for use with cryo tubes.









FluidX starter packs offer a one-stop solution for laboratories that want to implement a secure sample storage system at a competitive price.

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Tailored packages can also be created on request.

	BASIC STARTER PACK A1	BASIC STARTER PACK A2	BASIC STARTER PACK B1	BASIC STARTER PACK B2	BASIC STARTER PACK C1	DELUXE STARTER PACK A1	DELUXE STARTER PACK A2	DELUXE STARTER PACK B1	DELUXE STARTER PACK B2	DELUXE STARTER PACK C1
	(Cat No 21-1001)	(Cat No 21-1101)	(Cat No 21-1002)	(Cat No 21-1102)	(Cat No 21-1003)	(Cat No 21-1011)	(Cat No 21-1111)	(Cat No 21-1012)	(Cat No 21-1112)	(Cat No 21- 1013)
XTR-1 ELITE Single tube reader (20-1003)	~	~	~	~	$\checkmark$	~	$\checkmark$	~	~	~
XTR-96 Whole rack 2D tube reader. (20-2002)						~	~	~	~	✓ (cryo model)
STANDARD 2D-CODED TUBES 40 racks 0.5ml, 1.0ml or 1.4ml. 96 tubes/rack. (66-xxxx)	~		~			~		~		
2D-CODED TUBES WITH JACKET 40 racks 0.75ml, or 1.4ml. 96 tubes/rack. (67-xxxx)		~		~			~		~	
2D-CODED CRYO TUBES 1000 tubes, precapped. 2ml or 4ml, internal or external thread. (65-xxxx)					~					~
PIERCABLE SEPTUM SEAL Natural on backing plate of 96 caps. 50 mats/case. (65-73000)	~	1				~	~			
SCREW CAPS Orange 100/bag. (65-53107)			~	~				~	~	
MANUAL TUBE DECAPPER For single tubes. (65-54000)	~	~				~	~			
MANUAL TUBE DECAPPER For 8 tubes. (65-54001)	~	~				~	~			
MANUAL TUBE DECAPPER For single cryo tubes. (65-54003)					~					~
SCREW CAP REMOVER (54-54004)			~	~				~	~	
XTP-1 COMPACT Manual tube picker (10-51001)	~	~	~	~		~	~	~	~	
48-WAY DISPOSABLE RACKS with open bottom (65-754x)										~

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