

Mobil X-RAY Sistemlerinde Dünya Lideri...

LTEK TEKNOLOJİDE ÇÖZÜM ORTAĞINIZ....

Güvenlik

TEKNOLOJİ

İltek Teknoloji Türkiye Tek Yetkili Temsilcisidir...



RUGGE

COMPACT

NNOVATIVE







Counter Surveillance



**Border Control** 



Güvenlik | http://www.iltekteknoloji.com.tr/urun/elektronik-arama-sistemleri/mobil-x-ray-novo-sistem

Customs

## About NOVO

and Science and Art sectors.

😑 Highest Image Quality

Portability & Small Footprint

Simple & Intuitive User Interface (UX)
 Field Work Optimization & Safety

strong points:

Ruggedness

NOVO DR Ltd. is the leading developer and manufacturer of Portable Digital Radiography X-Ray Inspection Systems. We produce the latest generation DDA (Digital Detector Array) based radiography inspection systems for the Security, NDT

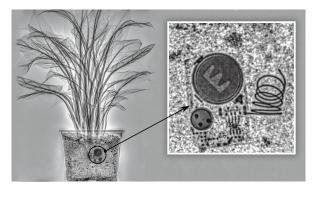
Combining our decades of experience and intensive inhouse R&D, NOVO DR is taking portable digital radiography to the highest level possible while emphasizing the following

## Applications

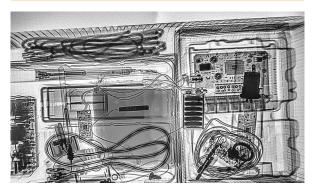
#### EOD



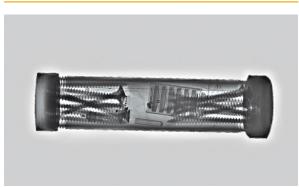
#### Counter Surveillance / VIP Protection



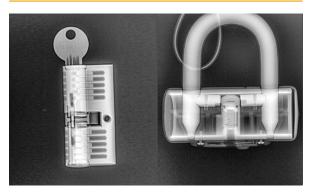
#### Customs



#### IED



#### Special Forces



#### Border Control







## • Highlights

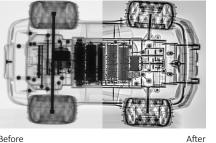


**Highest Image Quality:** 16-bit Latest Generation

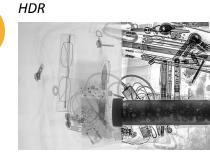
State of the art Digital Radiography detectors that produce, exceptional high quality images with incredible detail and high penetration capabilities ideal for both conventional and CRBN threat analysis.



Genie



Before



Before



One Pulse Image



After



**Cutting Edge Detectors:** Thinnest, Lightest, most Durable

- Unmatched Image Quality!
- Steel Penetration\* Over 3.3" (>85mm)
- 16-bit Latest Generation
- Thickness 0.6" (15.6mm)
- Drop Tested 27.6" (70cm)
- Load Proof 330 lbs. (150 kg)
- Lightest in the Market
- \* Tested with Golden XRS-3 at ~10" (25cm)



## Versatile System Casing:

Complete System in a Single Case

- Detector
- Tablet & NOVO's Touch Software



Suitable for all Terrain and Weather Conditions

- Usage in Extreme Weather Conditions
- MIL-DTL 38999 Connectors
- Titanium Magnetic Connectors
- Proprietary Design Cables
- MIL-STD-810G Tablets
- Drop Tested Detectors
- Rugged Cases



#### Parallel Multi Location Control & Display:

Use one tablet closer to the inspected object and a second tablet from a greater distance. Both tablets can be used to:

- Control the System
- Display X-Ray Images
- Image Enhancing, Storage & Sharing





#### Touch Software:

Simple User Friendly Touch Interface

- Operating & Controlling the System
- Powerful Automatic Enhancing Algorithms
- Optimal Viewing Experience
- Variety of Tablets; rugged 7" up to a 20" 4K display.
- Windows<sup>®</sup> 10

#### Windows 10





#### Longest Battery Life:

Over 16 Hours of System Operation

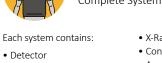
While out in the field battery longevity can be crucial, with over 16 hours of operation with a single full charge, you can focus on what's important.



3



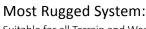




- Controller Accessories













6.1 lbs. (2.8 kg)

X-Ray Source

## NOVO Touch Software



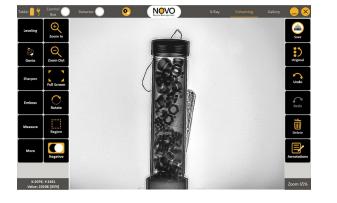
(4)

The NOVO Touch Software is NOVO's proprietary software developed to provide the best user experience and functionality in harsh & extreme field conditions.

- User friendly, native touch interface
- Built it tools such as the Genie, HDR, subtraction and manual & automatic stitching
- Intuitive operation for grabbing X-Ray images, annotating, archiving and sharing information
- Controls hardware features
- Compatible with the latest touch screen technology & standard PC's
- Supports Windows<sup>®</sup> 7-10











Compatible with XTK Software







## • NOVO Unique Software Features



#### The Genie Enhancement Feature

Proprietary, State-of-the-art algorithm that provides an unprecedented, perfect image with ALL the information shown at once



After



#### HDR Feature

View Easy & Hard to Penetrate Materials with High Dynamic Range Images



Steel Pipe Bomb inside a Backpack

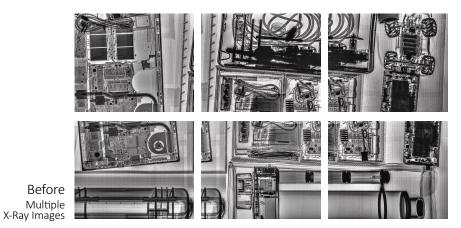


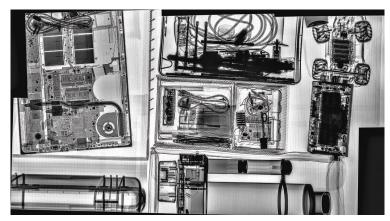
Electronic Device inside a Plant



#### Stitching Feature

Stitch Multiple Images using our Easy To Use, Manual Stitching Feature or our Extremely Fast, Automatic Stitching Feature





After One Large X-Ray Image 5

## Components

#### Detectors

6

The NOVO 15WS and NOVO 22WS Detectors provide outstanding image quality in a rugged, durable, thin design and are the latest in DR imaging technology.

- Lightest in the Market
- Dual direction Titanium magnetic cable connector
- Quick removable & rechargeable battery
- Wireless & wired operation
- Specifically designed for fieldwork & harsh weather conditions



Dual Direction Titanium Magnetic Cable



Detector Model NOVO 15WS NOVO 22WS 9.1" x 11.2" 14.0" x 16.8" Detector Imaging Area (23.1cm x 28.4cm) (35.6cm x 42.7cm) 10.6" x 13" 15.2" x 18.2" **Detector Size** (26.9cm x 33cm) (38.5cm x 46.2cm) Active Area (Imaging Area / 85% Active Area 74% Active Area Detector Size) **Detector Weight** 3.5 lbs. (1.6kg) 6.1 lbs. (2.8kg) Steel Penetration \* Over 3.3" (>85mm) Over 3.3" (>85mm) **Detector Load Proof** 330 lbs. (150kg) 330 lbs. (150kg) **Detector Drop Test** 27.6" (70cm) 27.6" (70cm) Detector Thickness 0.6" (15.6mm) 0.6" (15.6mm) Bit Depth 16 bit latest generation 16 bit latest generation

\* Tested with Golden XRS-3 at ~10" (25cm)

#### **Tablets**

NOVO offers a variety of tablets that can be operated from our customized case or used handheld.

- Pre-installed with the NOVO Touch Software
- Used to control the system's operation
- One or multiple parallel location control & display
- Ruggedized Tablets
- Rugged 7" up to a 20" 4K display
- A variety of Laptops Available
- Supports Windows<sup>®</sup> 10



A140

Panasonic Panasonic Toughpad™ Toughpad™ FZ-M1 7"

FZ-G1 10"

Toughbook<sup>®</sup> CF-33

Panasonic Toughpad<sup>™</sup> 20" 4K

	Panasonic Toughpad™ FZ-M1	Panasonic Toughpad™ FZ-G1	Panasonic Toughbook® CF-33	GETAC A140	Panasonic Toughpad™ 4K
Screen Size	7"	10.1″	12"	14"	20"
Screen Resolution	1280x800	1920x1200	2160x1440	1920×1080	3840x2560 (4K)
Screen Brightness (NIT)	500	800	1200	800	300
Multi-Touch	10 point, glove touch	10 point, glove touch	10 point, glove touch	multi touch screen	10 point touch
Operating System	Supports Windows 10	Supports Windows 10	Supports Windows 10	Supports Windows 10	Supports Windows 10
Weight	1.2 lbs. (0.54kg)	2.5 lbs. (1.1 kg)	3.4 lbs. (1.5 kg)	5.1 lbs. (2.3 kg)	5.27 lbs. (2.4 kg)
Military Standard	MIL-STD-810G	MIL-STD-810G	MIL-STD-810G	MIL-STD-810G	N/A
Dust & Water Resistance	IP65	IP65	IP65	IP65	N/A
Drop Rating	5 ft (1.5m)	4 ft (1.2m)	4 ft (1.2m)	4 ft (1.2m)	1 ft (30cm)

#### Cases

NOVO Offers a variety of customized cases for a wide range of applications.

- Customized internal & external design
- Rugged
- Covert and Smallest Foot Print
- Lightweight

#### X-Ray Sources

NOVO's systems are designed to operate with the entire range of Golden Engineering X-Ray sources (both old and new generations).

- Specially designed connector/picatinny connects the Golden to the Control Box for quick deployment
- Operational safety distance is easily obtained with wired or wireless capabilities
- The Golden X-Ray sources are portable, battery operated, lightweight & contain no radioactive materials



	XR150	XR200	XRS-3	XRS-4
KVP	150	150	270	370
Weight	4.9 lbs. (2.2 kg)	10.7 lbs. (4.8 kg)	12.1 lbs. (5.5 kg)	22 lbs. (10.5 kg)
Size	9.1" x 3" x 4.1" (23.1cm x 7.7cm x 10.3cm)	10.7" x 4.3" x 5.8" (27.2cm x 10.8cm x 14.8cm)	14.2" x 4.3" x 5.8" (36.1cm x 10.9cm x 14.8cm)	17.4" x 5.4" x 7.9" (44.3cm x 13.8cm x 20.1cm)



Backpack Backpack

Backpack Backpack

Rover Case

NOVO's Customized Cases	Description	Case External Dimensions
Rover Case	Rugged iM2750 Pelican™ case	24.6" x 19.7" x 14.4" (62.5cm x 50cm x 36.6cm)
Patrol Case	NOVO's fully sized backpack	28.0" x 19.0" x 13.0" (71.1cm x 48.3cm x 33cm)
Ultimate Case	NOVO's Customized Ultimate backpack	23.0" x 17.3" x 9.45" (58cm x 44cm x 24cm)
Tactical Case	S115 Pelican™ backpack	18.0" x 13.0" x 10.0" (45.7cm x 33cm x 25.4cm)
Urban Case	5.11 Covrt™ 18 backpack	19.0" x 12.25" x 6.5" (48.3cm x 31.1cm x 16.5cm)

## Components - Controller

#### **Control Box**

(8)

The Control Box is NOVO's fully featured Controller. It provides additional capabilities such as working with the Folding Slider and Lookout. In addition, it provides the utmost flexibility with system setups as it can work in wireless, hybrid & wired communication.

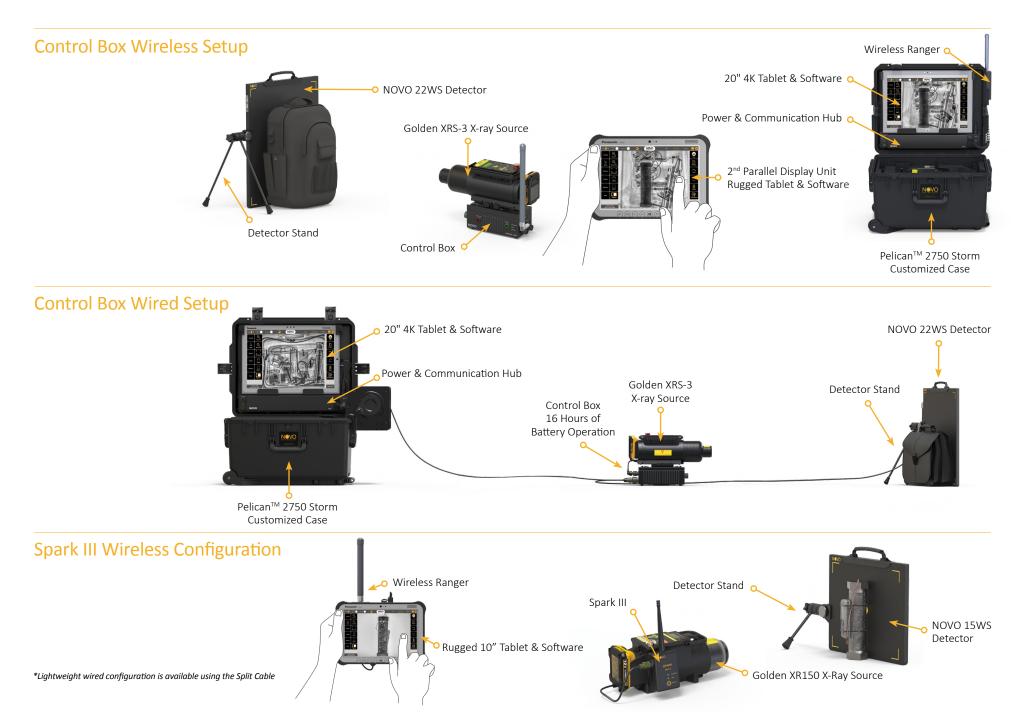
#### Wireless Spark III

The Wireless Spark III is NOVO's Extremely Lightweight Controller. Making it the Ideal controller when minimum weight on target is required.



	Weight	Unlimite operation w	Built-in Bat	Wired/Hyl	Wireles	Supports Golden Sou	Picatinny q connection to	Elevates X- Source	MIL-DTL 38 connecto	Weatherp design	LED Indicat	White LE flashligh	Infra-red flas	Siren Indica when X-Ray	Supports Pa Multi Loca Control & Di
NOVO Control Box	5.3 lbs. (2.4 kg)	$\checkmark$	16 hours	$\checkmark$	400m Line of Sight	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
NOVO Wireless Spark III	0.7 lbs. (0.3 kg)	X	6 hours	Х	400m Line of Sight	$\checkmark$	$\checkmark$	X	$\checkmark$	$\checkmark$	$\checkmark$	X	X	Х	×

## • Example Setups



## Systems

NOVO offers a wide variety of Systems suitable for the various Security applications. The following are NOVO's most popular Systems:

1

For special requests & custom configurations please contact us at: info@novo-dr.com

#### Rover 15

- 1. NOVO 15WS Detector
- 2. Detector Stand
- 3. Panasonic G1 10.1" Rugged Tablet & NOVO Touch Software
- 4. NOVO Control Box attached to Golden XRS-3\*
- 5. Pelican<sup>™</sup> 2750 Storm Customized Case
- 6. NOVO Wireless Ranger
- 7. 50m Comm. Cable on Removable Reel
- 8. NOVO Power & Communication Hub

\*Fits the Golden XR150, XR200 & XRS-3 X-Ray Sources

#### Tacti al 15

- 1. NOVO 15WS Detector
- 2. Detector Stand
- 3. Panasonic G1 10.1" Rugged Tablet & NOVO Touch Software
- 4. NOVO Control Box attached to Golden XRS-3\*
- 5. S115 Pelican<sup>™</sup> Customized Backpack
- 6. NOVO Wireless Ranger
- 7. 20m Comm. Cable
- \* Fits the Golden XR150, XR200 & XRS-3 X-Ray Sources

#### Urban 15

- 1. NOVO 15WS Detector
- 2. Detector Stand
- 3. Panasonic G1 10.1" Rugged Tablet & NOVO Touch Software
- 4. NOVO Spark III attached to Golden XR150\*
- 5. 5.11 Covrt<sup>™</sup> 18 Customized Backpack
- 6. NOVO Wireless Ranger
- 7. 10m Split Comm. Cable
- \* Fits the Golden XR150, XR200 & XRS-3 X-Ray Sources



- •

NOVO

D -D OD

3 (

8 0-



#### Rover 22

- 1. NOVO 22WS Detector
- 2. Detector Stand
- 3. Panasonic G1 10.1" Rugged Tablet & NOVO Touch Software
- 4. NOVO Control Box attached to Golden XRS-3\*
- 5. Pelican<sup>™</sup> 2750 Storm Customized Case
- 6. NOVO Wireless Ranger
- 7. 50m Comm. Cable on Removable Reel
- 8. NOVO Power & Communication Hub

\* Fits the Golden XR150, XR200 & XRS-3 X-Ray Sources



11

#### Rover 22 4K

- 1. NOVO 22WS Detector
- 2. Detector Stand
- 3. Panasonic 20" 4K Tablet & NOVO Touch Software
- 4. NOVO Control Box attached to Golden XRS-3\*
- 5. Pelican<sup>™</sup> 2750 Storm Customized Case
- 6. NOVO Wireless Ranger
- 7. 50m Comm. Cable on Removable Reel
- 8. NOVO Power & Communication Hub
- \* Fits the Golden XR150, XR200 & XRS-3 X-Ray Sources



#### Ultim te 22

- 1. NOVO 22WS Detector
- 2. Panasonic G1 10.1" Rugged Tablet & NOVO Touch Software
- 3. NOVO Control Box attached to Golden XRS-3\*
- 4. NOVO's Customized Ultimate Backpack
- 5. NOVO Wireless Ranger
- 6. 20m Comm. Cable
- 7. Additional Accessories

\*Fits the Golden XR150, XR200, XRS-3 & XRS-4 X-Ray Sources



## 12 • Accessories

#### Lookout

The NOVO Lookout is a Lightweight, 3 in 1 accessory enabling the following capabilities.

#### Organic Detection

- Assists in identification of the content and nature of an inspected item by providing organic / in-organic detection
- A color X-Ray image is automatically displayed
- The Organic Detection Dual Energy Images comply with airport security standards

#### Live Video

- Provides a Live Video stream of the inspected item
- The Camera switches automatically between day / night mode (Infra-red)
- Provides a Still Image that can be grabbed and used for analysis and documentation

#### Live Audio

- Provides a Live Audio stream of the inspected environment allowing the operator to hear the Golden's "clicks" in addition to monitoring the sounds in the surrounding area
- Controlled completely by the NOVO Touch Software
- Compatible with Golden Engineering XR150, XR200 and XRS-3 sources





### **Folding Slider**

The NOVO Folding Slider is the ideal solution for screening large objects.

- Screening area of 2X2 using the NOVO 22WS Detector
- Screening area of 3X2 using the NOVO 15WS Detector
- Controlled by the NOVO Touch Software
- Completely automated movement
- Automatically generates an outstanding high-quality mosaic image
- Small footprint for max portability & easy storage





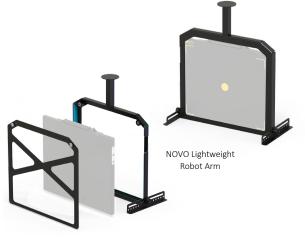
	NOVO 15WS Detector	NOVO 22WS Detector		
Grabbing Size	3x2	2x2		
Folding Slider ~Size (folded)	37.4" x 13 (95cmx35			
NOVO Folding Slider Rugged 1740 Pelican™ Case	44.2" x 16.1" x 14.0" (112.2cm x 40.9cm x 35.6cm)*			

#### **Robots Integration**

NOVO's lightweight, small profile Detectors can be integrated with various robots while not effecting the robot's manipulation, flexibility and reach.

- Integration with both Small & Large robots
- Special Robot Arm for mounting the NOVO 15WS Detector
- NOVO's system can be controlled independently or channeled through the robot





\*External Dimensions

#### Eagle - Long Range Wireless

The NOVO Eagle is an Extremely Long Range Wireless transceiver, which extends the wireless communication between the tablet and the inspection area – Detector and X-Ray Source.

- 3.3km (2 miles) line of sight
- Fully wireless or hybrid communication
- Ideal for Urban scenarios with high RF interference
- Ultimate CBRNE accessory where long operation distances are required
- 1/4" standard threading for tripod connection
- 5 Hours of internal battery operation
- Allows for robot integration





Detector Side (Downrange)



#### Wireless Ranger

The NOVO Wireless Ranger is a wireless transceiver, which extends the wireless communication range between the tablet and the inspection area.

- Battery-free
- Lightweight
- Staggering 400m line of sight
- Built in magnets to mount on any ferromagnetic object tablet, case, vehicle etc.

STORY WWWWW

)....

#### **Communication Cable**

The communication cable provides reliable and fast data transmission between the various system parts.

- Power Over Line for unlimited operation when using an external power source
- Lightweight, robust custom reel- connected to the case or as "stand-alone"
- Extension cables of 50m, 100m and 150m
- Maximum of 300m wired operation range



Built-in 50m Reel



## (14) • Accessories

#### Armor Kit

The Armor Kit Contains the NOVO Armor, which provides additional mechanical protection to the NOVO 15WS & NOVO 22WS Detectors, the Armor Stand and a traveling soft cover.

- Newest shock absorbent technology case
- Water resistant design
- Supports wired & wireless communication
- Multiple positioning options
- Tripod connection using the Built-in 1/4" threads
- Simple Detector battery replacement



NOVO Armor 22



NOVO Armor 15



### Soft Protective Cover

The Detector Soft Protective Cover provides additional protection for the NOVO 15WS & 22WS Detectors.

- Weather & impact protection
- Special opening for Tripod Mount access
- Various positioning options using a carrying strap or D-Rings
- Supports wired & wireless communication
- Lightweight & small footprint





### **Detector Stand**

The Detector Stand is a custom-made accessory that firmly holds the Detector in an upright position (portrait or landscape).

- Low profile design
- Utmost flexibility in tight places
- Multiple positioning options standalone (figure a) or leaning on a wall (figure b)

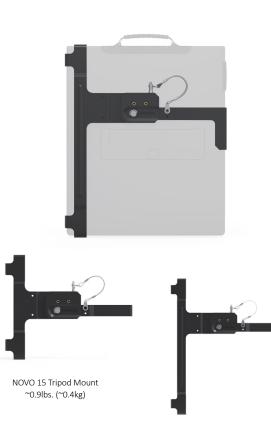




#### **Tripod Mounts**

The Tripod Mount is a lightweight accessory that firmly holds the detector and provides various positioning options.

- Two 1/4" standard threads for tripod or manipulation arm connection
- Secured connection to the Detector using a safety pin
- Numerous positioning options



NOVO 22 Tripod Mount ~1lbs. (~0.5kg)

1.	SELECT	а ро	pular	system	or fill i	in the	form	with you	ır
	special	reque	est						

2. SEND us the form and we will send you a  $\ensuremath{\mathsf{QUOTE}}$ 

#### **NOVO's Popular Systems:**

• Request a Quote

Rover 15 Tactical 15 Urban 15 Rover 22 Rover 22 4K Ultimate 22

#### **Special Requests**

#### **Detectors**

NOVO 15WS NOVO 22WS

#### **Controllers**

Control Box Wireless Spark III

#### **Tablets**

#### (with the NOVO Touch Software Pre-installed)

7" - Panasonic Toughpad™ FZ-M1
10.1" - Panasonic Toughpad™ FZ-G1
12" - Panasonic Toughbook® CF-33
12" - Panasonic Toughbook® CF-33 With Keyboard
14" - GETAC A140
20" 4K - Panasonic Toughpad™ 4K
Laptop

#### Cases

Rover Hard Case Ultimate Backpack Patrol Backpack Tactical Backpack Urban Backpack

#### X-Ray Sources

XR150	C
XR200	C
XRS-3	
XRS-4	

#### **Accessories**

	Accessones
Comm. Cables	Eagle -
10m Cable	Long Range Wireless
20m Cable	Folding Slider
50m Cable	Armor Kit
50m Extension Cable	Soft Protective Kit
100m Extension Cable	Lookout
150m Extension Cable	Robot Arm
Other	Tripod Mount

#### Comments, Remarks or Special Requests

Türkiye Tek Yetkili Temsilcisidir...

Digital Radiography

# Mobil X-RAY sistemlerinde Dünya Lideri



İLTEK TEKNOLOJİ LTD. ŞTİ. İLTEK Anayurt Güvenlik Sistemleri Savunma Teknolojileri Bilişim ve Elektronik Ticaret Ltd.Şti. Tel: +90 312 440 42 85 Fax: +90 312 440 42 86 info@iltekteknoloji.com.tr / www.iltekteknoloji.com.tr Adres: Hilal Mah. 687 Sokak . Boyner Apt. No: 3/7 Çankaya / ANKARA / TURKEY

J RUG COMPACT NNOVATIVE

www.iltekteknoloji.com.tr