# TOMRA





# Up to the challenge, in any conditions











## Choose the super-durable solution your environment requires

The TOMRA S1 Rugged is specially designed to withstand demanding use and exposure to the elements in metropolitan areas. With top-of-the-line system integrity and resistance to wet conditions in semi-outdoor locations, your reverse vending machine is up to the challenge.

# Make more time for your store

Minimize staff interruptions with a more efficient reverse vending machine. The TOMRA S1 Rugged's storage bin can hold one-third more than the previous model, which means fewer bin changes, more uptime, and less staff time spent managing your machine.



# GLASS



### Create a smoother user experience

Satisfied redeemers will keep coming back and will spread the word about the best recycling experience in town. Powered by TOMRA Flow Technology<sup>™</sup>, the TOMRA S1 Rugged accepts containers in a smooth, fast flow, with simple on-screen instructions that are easy to read – even in bright sunlight.



# Be ready to go when redeemers come to recycle

Collect more cans, plastic bottles and glass bottles with a machine that's easy to keep up and running. Between the TOMRA S1 Rugged's smooth user experience, highcapacity and a support team that's always at your service, redeemers can count on you to be ready for them whenever they're ready to recycle.





### More than a machine, with smart digital tools

Your TOMRA S1 Rugged is fully compatible with a suite of digital tools and APIs that help you improve operational efficiency, engage your customers, and maximize uptime to create the optimum recycling experience for your customers and employees.



# Retailers help the world recycle

Deposit return systems (DRS) for beverage container recycling help keep valuable resources in a continuous loop of use and reuse. At TOMRA, we call this process Clean Loop Recycling.

As a retailer, you're at the heart of Clean Loop Recycling. You play a critical role at the point where consumers buy and return their containers.





# Let's put recycling to work for you

Choosing to partner with TOMRA means creating a great recycling experience for your customers, making a smart investment for your store, and choosing a solution that brings peace of mind and excellent support for your operations.

# TOMRA S1<sup>TM</sup> Rugged Up to the challenge, in any conditions



<b>MEASUREMENTS*</b>		STORAGE CAPACITY*	
<b>Dimensions</b> [W × D × H] Infeed height Adjustment range for height	816 mm x 1100 mm x 1792 mm 1210 mm +25 mm	Accepted containers	Up (pla 1 ty
Footprint Weight <sup>1</sup>	0.9 sqm 323 kg <sup>1</sup>	Storage capacity per bin <sup>3-4</sup>	PE Ca Gla
STANDARD CONFIGURATIO	N* Standalone reverse vending machine	Container sizes (min/max size)	Bo <sup>-</sup> Ca
Bin unload direction Number of cabinets & bins Compactors *	Front unload 1 cabinet, 1 bin PET crusher / Can crusher / Mix crusher (cans, PET bottles), Glass crusher. Drop for one-way glass bottles or refillable PET bottles *	ENVIRONMENTAL Humidity Temperature Noise *	Ma +0° Gla
Colors User interface	<ul> <li>RAL 7042 [possible to wrap machine for a custom look]</li> <li>Display: 10,4" touch display with high brightness,</li> <li>suitable for direct sunlight exposure, video and</li> <li>sound capabilities, user guidance on</li> <li>machine screen</li> </ul>		Lp, PE Lp, Alu Lp,
Printer:	Thermal printer	IP code * Measurements were performed b	IPX based on
* Compactor selection may depend	on the selected type of power supply on the machine $(1 \text{ ph}/3 \text{ ph})$		

Compactor selection may depend on the selected type of power supply on the machine (1ph/3ph).

### RECOGNITION

Recognition technology	TOMRA Flow Technology™ (360° instant
	recognition, shape recognition, full container
	detection, barcode recognition, metal detection)
Speed capability <sup>2</sup>	Up to 45 containers per minute <sup>2</sup>
Speed capability <sup>2</sup>	detection, barcode recognition, metal detection)

### ELECTRICAL

Power consumption	Idl
Mains *	4C
	60
	(de
	23
	fus

\* Depending on compactor selection.



### CONNECTIVITY

**External IT interface Digital tools** 

LAN (Ethernet TCP/IP), POS compatible Fully compatible with TOMRA's portfolio of digital products and APIs

\* May vary in different countries due to variations in beverage container materials, shapes and sizes.

- <sup>1</sup> May vary according to packaging.
- <sup>2</sup> Performance vary across markets, deposit regulations and system requirements.
- <sup>3</sup> Capacities will vary with object mix, type and system configuration.
- <sup>4</sup> Weight limited.

### TOMRA

### Get in the Loop at tomra.com/reverse-vending



#### **TOMRA CERTIFICATION**

TOMRA SYSTEMS ASA has implemented and maintains a Quality and Environmental Management System which fulfils Nemko's provisions for Management System Certification and the requirements of standards NS-EN ISO 9001:2015 and NS-EN ISO 14001:2015, with the scope described by the organization on 2018-05-29. The certification covers the development and delivery of automated systems for recycling.

#### LEGAL COMPLIANCE

The CE mark on this product confirms compliance with the following European Directives: 2006/42/EU, Community Legislation on Machinery. 2014/30/EU, Electromagnetic Compatibility (EMC). 2011/65/EU, Restrictions of Hazardous Substance (RoHS). 2012/19/EU. Waste Electrical and Electronic Equipment (WEEE).

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Ip to 3 types of non-refillable containers plastic bottles, cans and glass bottles), and type of refillable container (PET) ET bottles: Up to 1100 (compacted, 0,5l)<sup>3</sup> **Cans:** Up to 3200 (compacted, 0,33I) <sup>3</sup> Glass bottles: Up to 350 <sup>4</sup>

Bottles: 50-130 mm x 85-380 mm (D x H) **Cans:** 50-100 mm x 80-200 mm (D x H)

laximum 90% relative humidity, non-condensing 0°C to +40°C / +32°F to 104°F Glass bottles: Lw,d = 90.8 + 4 dBA / p,d@0.5m = 77.5 + 4 dBAPET bottles: Lw,d = 81.1 + 4 dBA / p,d@0.5m = 67.8 + 4 dBAluminum cans: Lw,d = 80.3 + 4 dBA / p,d@0.5m = 67.0 + 4 dBAPX4 according to EN 60529

on ISO 9614-2.

lle 59 W – Max. 2 kW 00 V 3 ph 50 Hz, 16 A fuse / 208 V 3 ph 0 Hz, 20 A fuse, C-characteristics ledicated grounded mains supply) 30 V 1 ph 50 H, 13-16 A use, C-characteristics (dedicated grounded mains)



# TOMRA Collection

TOMRA Collection is part of the TOMRA Group, which is Leading the Resource Revolution by transforming how we obtain, use, and reuse our world's resources.

With approximately 85,000 installations across more than 60 markets, retailers and consumers around the world rely on our reverse vending machines to collect more than 46 billion used bottles and cans each year, which can be recycled into new containers.

Clean Loop Recycling is the easy and rewarding way to make choices that make change.

Get in the Loop at **tomra.com** 



