

TM2000 Trailer Monitoring Unit

CAPTURE ALL THE DATA YOU NEED TO VISUALIZE THE STATUS OF EVERY LOAD IN REAL TIME

The TM2000 is the hardware-enabling component in Zebra's SmartPack family of load efficiency solutions that helps maximize trailer utilization to minimize mileage, fuel and maintenance costs, delivery times — and environmental impact. With the TM2000, you get the rugged design required for year-round reliable operation out on the dock. Two cameras provide the data required for real-time load visualization. Integrated software automatically collects and transmits all the required data to the Zebra SmartPack Server Software, which calculates the metrics for each load. Onboard processing, memory and storage minimize the impact on your network bandwidth. Flexible connectivity options make deployment easy. And multicolor LEDs can be seen from virtually any angle, providing your workforce with the at-a-glance load and TM2000 operational status needed to improve productivity, load efficiency and TM2000 uptime.



Integrated 3D analytics software

Automatically collects and sends all data to the Zebra SmartPack Server Software, which analyzes the data and outputs the results to an easy-to-read dashboard.

RGB camera

Takes time-stamped photos of the inside of the trailer as the load progresses, enabling you to see the load at any point in time via the server-based SmartPack dashboard.

3D depth sensor camera

Captures point cloud information to create a 3D spatial image of the inside of the trailer as it is loaded, providing the data required to calculate load metrics, such as trailer fullness and load density.

Onboard image storage

All photos and data are stored on the TM2000 to help preserve network bandwidth. You define when the information or a subset of the information is sent to the server. For example, during peak loading times, photos can be sent every two minutes to support real-time load analysis — and when load activity is minimal, you can opt to send photos at less frequent intervals.

Flexible connectivity

The TM2000 can communicate with the server software via WiFi or Ethernet, simplifying deployment and increasing deployment flexibility.

Designed for life on the dock

The TM2000 is built for demanding dock environments. The cast aluminum housing is impact-resistant, ready for the inevitable bumps that can occur throughout the loading process. With its wide operating temperature range, the TM2000 can be used in subzero temperatures and the hottest climates. And with IP54 sealing, the TM2000 is dust- and water-resistant, offering reliable operation despite exposure to dust, rain and snow.

“See everywhere” LED indicators

Multicolor LEDs provide all the colors you need to designate load and TM2000 operational status — for example, if a load is half full, or whether the WiFi or Ethernet connections are up and running. And since the LEDs are visible from the front, back and underside of the unit, status is easily visible from the dock, as well as inside the trailer.

CAPTURE THE DATA YOU NEED TO REIMAGINE YOUR LOADING OPERATIONS WITH THE TM2000.

For more information, please visit www.zebra.com/tm2000

TM2000 Specifications

PHYSICAL CHARACTERISTICS	
Case Dimensions	11.3 in. W x 6.3 in. H x 7.1 in. D 28.7 cm W x 16.0 cm H x 18.0 cm D
Connectivity	802.11b/g/n with external antenna USB 2.0 Ethernet 10/100Mbps
LED Indicators	RGB camera indicator Depth sensor indicator WIFI communication Status Power
PERFORMANCE CHARACTERISTICS	
CPU	1.5 GHz dual core ARM Cortex A9
Operating System	Linux
Memory	Flash:64 GB; RAM: 1 GB
ENVIRONMENTAL	
Operating Temperature	-22° F to 122° F/-30° C to 50° C
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Operating Humidity	10% to 95% non-condensing
Environmental Sealing	IP54 (IEC529)
Power	Maximum: 2.6A Max @ 115VAC Initial inrush current: 70A max when operating from 115VAC
Housing	Damage-resistant cast aluminum housing

DATA CAPTURE	
Depth Sensor	
Working Range	54 ft. (16.5 m)
Field of View	57.5° x 45°
Image Size	320 x 240
Laser Safety	Class 1
RGB Camera	
Field of View	120°
Image Size	1920 x 1080
Frame Rate	30 frames per second
MOUNTING AND ACCESSORIES	
Mounting Features	Two (2) pivot screws Two (2) locking screws Requires mounting bracket accessory Requires AC line cord
Mounting Accessory	LMU mounting bracket available
PRODUCT WARRANTY	
Subject to the terms of Zebra Technology's hardware warranty statement, the TM2000 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, please visit: http://www.zebra.com/warranty .	
RECOMMENDED SERVICES	
Planning and deployment: Integration Services and System Design Application development: Custom Software Development Post deployment support: Zebra OneCare Select	



NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
contact.emea@zebra.com

Latin America Headquarters
+1 847 955 2283
la.contactme@zebra.com