# AUTOMATED GUIDED VEHICLES

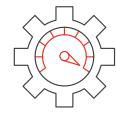
RAYMOND COURIER™

RAYMOND



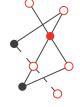
# OPTIMIZE, CONNECT, AUTOMATE.

The iWAREHOUSE® Intelligent Warehouse Solutions portfolio and Raymond's intralogistics capabilities empower companies to optimize, connect, and automate their operations with a variety of tools and services. We believe this approach is essential to improving your facility functions, as well as creating a culture of continuous improvement throughout your company. Through customized solutions that are the right fit for your business, we provide you with a path to continue to increase productivity, efficiency, and competitiveness.



OPTIMIZE your operations, systems, assets, fleet and personnel to ensure everything in your facility provides the most value. Raymond applies the principles of lean management to help you achieve optimization, eliminate inefficiencies, and identify and solve challenges.

Solutions include Lean Management, Material Handling Equipment, Financing, Rentals, Virtual Reality Learning, and Maintenance/Service.



CONNECT your facilities with innovative technologies. Smart technologies, like telematics, help operations gather and analyze data — providing actionable insights that can be implemented to deliver measurable business results.

Solutions include Fleet and Asset Management Systems, Operator Assist Technologies, Labor Management Systems, Real-Time Location Systems, Object Detection and Notification Systems, and Consulting.



AUTOMATE your operations to make production and distribution processes efficient, easily repeatable, consistent and cost-effective. Automation will enhance processes, maximize existing labor and resource utilization, as well as make your operation more flexible and scalable.

Solutions include Automated Guided Vehicles, Autonomous Mobile Robots, Automated Storage and Retrieval Systems, Robotics, and Consulting Services.

A PROVEN,
FLEXIBLE, SIMPLE
SOLUTION

# RAYMOND COURIER™ AUTOMATED GUIDED VEHICLES

### FLEXIBILITY, SIMPLICITY, AND ATTRACTIVE RETURN ON INVESTMENT

Raymond Courier<sup>™</sup> Automated Guided Vehicles (AGVs) offer a range of material handling capabilities to increase productivity, enhance labor engagement, and optimize your allocation of resources. Raymond Courier AGVs can help you run more efficiently and cost-efficiently.

Flexible and scalable, Raymond Courier AGVs offer a solution that can be tailored to your changing workflows. The Courier can also be integrated with other systems—including conveyors, robotics, and automated storage and retrieval systems—to give you a more complete automated solution for moving goods through your facility.

From initial consultation to customized implementation and ongoing support, Raymond systems experts are always available to help you adopt and adapt automated technologies at any time.

BENEFITS AT A GLANCE



System can be built to suit virtually any application with no pre-defined setup or design requirements.



Responsive, familiar service from the same support network and technicians that cover your manual trucks for greater confidence, reliability, and uptime.



Minimizes opportunities for operator error with a precise vision guidance system that recognizes the environment and detects obstacles.

### + superior flexibility and productivity

with a hybrid design that allows automated operation or manual operation with one employee able to manage multiple AGVs

### + easy implementation

with no infrastructure changes or business interruptions, so your trucks can be operational from day one

### + simple to use

with an intuitive operator interface that allows for quick, easy route teaching and truck dispatching

### + ongoing scalability

with routes that can be quickly transferred between trucks for quick redeployment to different facilities, locations, shifts or applications



### + seamless integration

with dedicated Fleet Management Software to monitor, manage, and control trucks

### + enhanced operator-free workflows

with automated options like battery charging, hitching/unhitching, and pallet engagement

### + exceptional reliability

with the industry's most robust chassis design, consistent with other Raymond models for greater operator familiarity and productivity

### EASILY REPROGRAMMED—BY US, OR BY YOU

Raymond Courier AGVs can be quickly and easily reprogrammed and redeployed to adapt to your changing workflows and throughputs. Changes can be made by internal personnel or by calling your local Raymond systems experts.

### COURIER 3010 **AUTOMATED PALLET TRUCK**

Horizontal transport; ideal for transporting pallets over long hauls, for put-aways, cross-docking and load staging applications

- + Reverse motion and obstruction sensor (optional)
- + Auto pallet engagement and drop-off
- + Universal tapered forks
- + Single and double fork lengths available



### COURIER 3020 **AUTOMATED TOW TRACTOR**

Horizontal transport; ideal for pulling cart or trailer loads in batch picking, parts-toline and end-of-line (automated conveyor cart) applications

- + Dual slots for hitch height adjustment with optional automatic hitch and unhitch
- + Low Clearance Arch available for restricted-height areas down to 63" (optional)



Horizontal transport; ideal for pulling carts or trailers with heavy loads on flat ground or ramps in batch picking, parts-to-line and end-of-line (automated conveyor cart) applications

- + Dual slots for hitch height adjustment
- + Low Clearance Arch as standard design; can operate under low hanging structures
- + Ramp Capacity: 7,500 lbs. @ max 11%



COURIER 3030

(optional)

+ ITA fork design

**AUTOMATED STACKER** 

conveyor picking applications

+ Auto pallet engagement

+ Lane staging capability (optional)

Horizontal transport and vertical pallet handling

capability; versatile option ideal for pick-up and

+ Fork tip sensors confirm alignment with pallet

+ Pallet nested switch; stops truck if pallet slips

+ Low Clearance Arch standard; can operate under

+ 3D LiDAR object-detection sensor package

+ Reverse motion and obstruction sensor

pockets and detect potential obstructions (optional)

drop-off at dock, end-of-aisle, end-of-line and





CHOOSING Designed to operate on their own and handle a variety of functions, Raymond Courier AGVs enhance reliability, consistency, and efficiency THE PERFECT at all phases of your operation. From inbound to outbound, each model can automate **PLATFORM** specific applications to address the unique needs of your business.

	3010	3020	3220	3030
ТҮРЕ	Pallet Truck	Tow Tractor	Tow Tractor	Stacker
MAX CAPACITY (FLAT SURFACE)	8,000 lb	10,000 lb	15,000 lb	2,500 lb
OVERALL LENGTH	160.3"	66.1"	75.7"	121.5" with 42" forks
TURNING RADIUS	123.4"	60.1"	69.8"	69.9"

All Models: 24V Battery

Floor to Top of Vision Guidance Unit: 90.2" (models 3010 and 3020)

Floor to Top of Operator Interface Unit (Low Clearance Arch):

- + 63" (optional on models 3020/3220) (standard on 3220)
- + 61.5" (standard on model 3030)

		3030	3220   3020	3010
	Staging to Putaway (floor to rack or conveyor)	Х		
NBOUND	Staging to Pick & Drop Location	Х	X	х
NB NB	Crossdock (staging to staging)	Х	Х	Х
	Inbound Staging to Warehouse	Х		
z -				
EHOUS MATERIAL MOVEMENT	Pallets from Pick & Drop to Outbound Staging	Х	×	Х
R E H MATI	Trash/Dunnage Transport	Х	×	
	Pallet Picking (rack or conveyor to floor)	X		
	Layer Picking to Outbound Staging	Χ		
OUTBOUND	Order Pallets/Carts to Pack-Out	X	X	Х
	Pallets to Wrapper/Wrapper to Outbound Staging	Х	×	
	Warehouse to Outbound Staging	Х		
	Staging to Putaway (floor to rack storage up to 72")	X		
NBOUND	Staging to Pick & Drop Location	Х	Х	Х
υ   υ   z   ——	Inbound Staging to Inventory	Х		
_ 				
	Parts (Kitted, Bulk, Small, etc) to Line	Х	X	
A C TERIAL	Sub-Assembly to Assembly Line		X	
U F MATE	Empty Container Management	Х	X	Х
Z	Trash/Dunnage Transport	Х	X	Х

Finished Goods to Warehouse

Finished Goods to Outbound

Finished Goods to Outbound Staging

VERY NARROW AISLE

# FLEET MANAGEMENT SOFTWARE

From controlling your trucks to giving you real-time updates on their location and status, Raymond Courier's Fleet Management Software gives you the visibility and functionality you need to monitor and manage your AGVs.

### CUSTOMIZABLE & CONFIGURABLE

Intuitive and comprehensive, the software is highly configurable to your specific application with customizable commands, rules, and notifications so you can adapt to your dynamic material flow and changing business needs.

SIMPLE AND INTUITIVE— FOR BOTH USERS AND MANAGERS

### USERS (ONTRUCK)

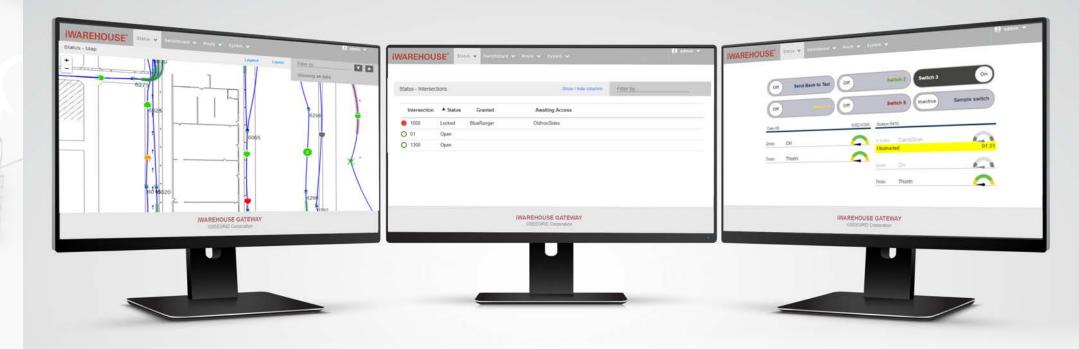
Quickly and easily take control of a truck at any time to adapt to dynamic warehouse environments.

#### MANAGERS (REMOTE)

Monitor and manage your Raymond Courier AGVs from any web-enabled device and make changes in real time to adapt to changing applications and material flows

AUTOMATED PALLET TRUC

TRAINED AUTOMATED ROL



### **KEY OPERATIONAL BENEFITS:**

### Real-Time Visibility & Tracking

Monitor your Raymond Courier AGVs from any smart device to receive updates on truck locations and status.

### **Traffic Control**

Controls traffic by granting or withholding access requests from individual trucks to control flow throughout your operation.

### **Instant Notifications**

Automatic text and email alerts can be configured around your SMTP server capabilities to inform battery charge, delivery status and more.

### **Material Tracking and Transit Status**

Operators receive estimated time of arrival at pick-up and drop-off points for more timely and efficient operator/truck interactions.

### System Integration

Integrate Raymond Courier AGVs with your custom systems if applicable — WMS/MES, carousels, robotics, and other automated systems—to create a more complete operator-free workflow.

### **Dispatch On-Demand**

Assign new routes to any location with remote calling, or dispatch available AGVs to a different task to support changing demand.

# OPTIONS TO CUSTOMIZE YOUR WORKFLOWS

From features that remove operator touch points in your workflow, to capabilities designed to enhance the flow of goods through your facility, Raymond Courier AGVs offer a variety of ways to optimize your use of trucks, space, and personnel.





The Raymond Courier Automatic Charging System allows all Raymond Courier AGV models to automatically dispatch to a charging station, charge the battery, and return to work—even when towing or carrying a load—for 24/7 automated operation and even greater reliability, productivity, and labor efficiency.

The Courier Automatic Charging System is integrated with iBATTERY® and iWAREHOUSE® systems to give seamless integration that controls when a Courier truck is sent to the charging station based on your selected preferences.

### CONFIGURE YOUR CHARGING METHODS AND SCHEDULE

WHEN	HOW	
Off-Shift	Full Charge	
Low Battery	Partial Charge	
Inactivity	Opportunity Charge	

### + ENHANCED UPTIME AND PEACE-OF-MIND

with integration into the Fleet Management Software that monitors and manages battery levels and controls when a truck is sent to the charging station.

### + INCREASED RUN TIMES AND ABILITY TO RUN 24/7

with opportunity charging that reduces battery charging time and allows more continual operation without the need to reinitialize trucks after a restart.

### + FASTER, MAINTENANCE-FREE CHARGING

with use of high-performance TPPL battery technology that requires no watering or other traditional maintenance.

#### + NO MANUAL UNHITCHING REQUIRED

with drive-through configurations that allow automated tow tractors to be charged while towing carts.

# ENGINEERED TO TAKE A LOAD OFF YOUR MIND

Raymond Courier AGVs work collaboratively and in tandem with each other, side by side with your operators, and hand in hand with your conveyors, forklifts, and other equipment.

From horizontal load transport to vertical pallet handling, simple cross-docking to more involved workflows, Raymond Courier offers the capabilities to seamlessly and reliably automate a variety of tasks in warehousing, distribution, and manufacturing operations.

No matter what your application, our systems experts can design and engineer a complete automated solution around your specific needs that can adapt and scale over time to evolve with your business.



### **IDEAL ENVIRONMENTS & APPLICATIONS**

### WAREHOUSING/DISTRIBUTION/3PL

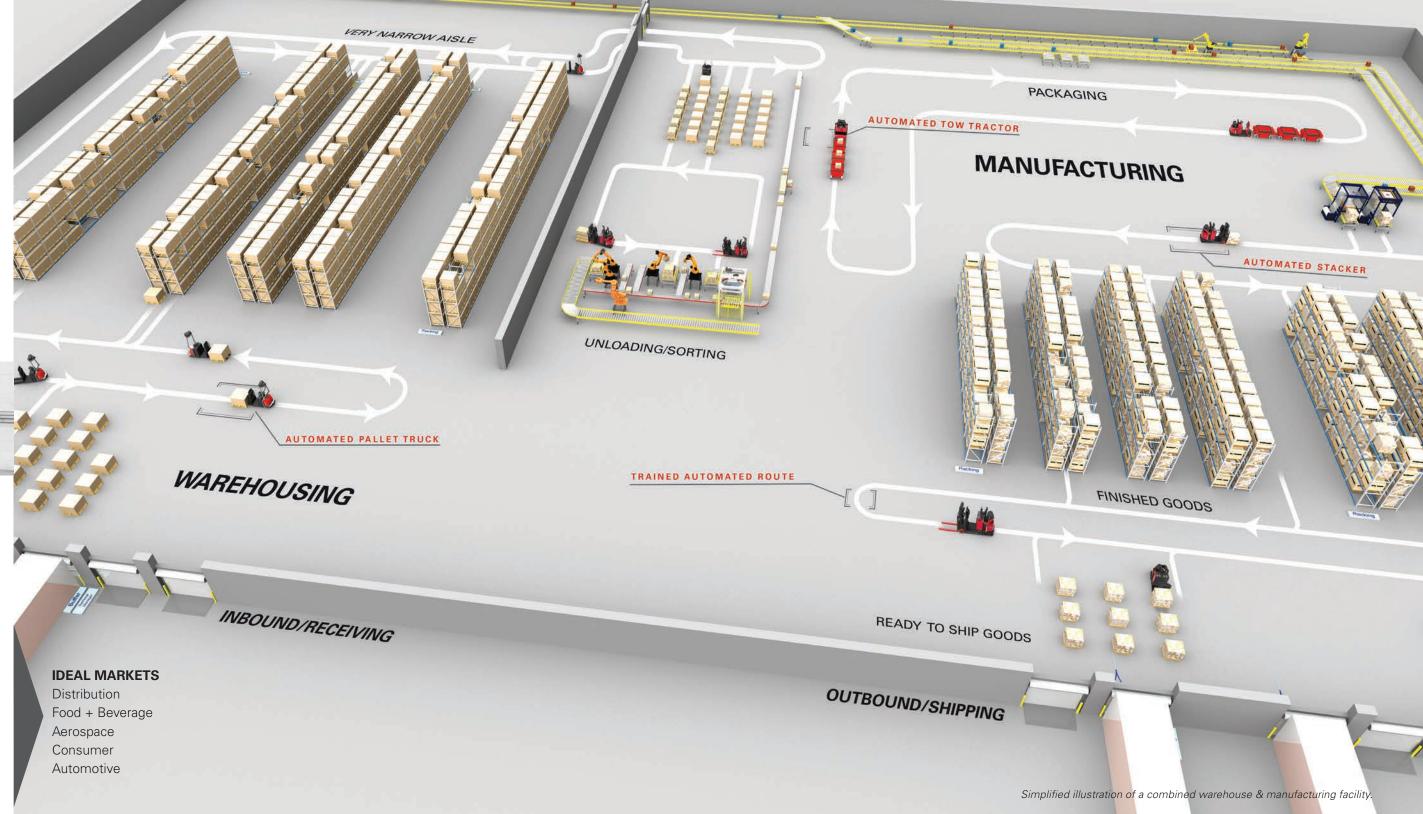
Inbound Receiving to Storage
Picking to Outbound/Packaging
Long Haul Transfers to Other Storage Locations
Staging to Pick and Drop Locations

### Types of Warehouses:

Consolidation Warehouses / Cross-Dock Distribution Centers / Break-Bulk Warehouses / Mixing/Order-Assembly / Distribution Facilities

### **MANUFACTURING**

Kitting Transfers
Parts-to-Line
End-of-Line to Stock or Dock
Finished Goods
Inbound Putaway
Staging to Pick and Drop Locations



## A CASE FOR THE RAYMOND COURIER

Through the unique combination and integration of The Raymond Corporation, Raymond Leasing, and our nationwide network of Solutions & Support Centers, Raymond offers a single source for top-quality equipment, flexible financing, and responsive service.

We'll do more than just personalize a leasing program to the unique needs of your business. As partners and consultants, we can help with everything from equipment selection to fleet sizing based on your material handling needs.

### AFFORDABLE OPERATING LEASE OPTIONS TO SUITYOUR BUDGET AND BUSINESS

	FMV Lease Monthly Cost	Effective Hourly Cost to Operate
36 months	\$4,827.14	\$8.94
48 months	\$3,936.38	\$7.29
60 months	\$3,312.91	\$6.14

This all-inclusive Courier lease includes a turn-key solution with Courier AGVs, Fleet Management Software, system installation with implementation, support services, extended warranty, and training.\*

Lease terms and pricing effective as of January 2024. Actual lease terms and pricing may vary. Consult your local Solutions and Support Center for a personalized system evaluation and quote.

## AUTOMATING A SOLUTION FOR TODAY'S LABOR CHALLENGES

As labor becomes increasingly hard to find and difficult to afford, automation is becoming an inevitable and invaluable option for warehousing, manufacturing, and distribution operations. By working collaboratively with your people and other automated systems, Raymond Courier AGVs help keep your goods moving, your workers happy, and your costs down by:

- + Efficiently and reliably performing repetitive pallet-handling and transportation applications.
- + Freeing operators to focus on more engaging, value-added tasks.
- + Minimizing idle time and maximizing productivity.
- + Enhancing your number of potential shifts without expanding your workforce.



# COLLABORATIVE AUTOMATION

# FOR MORE ENGAGED & PRODUCTIVE EMPLOYEES

By freeing operators from repetitive, lowvalue tasks, Raymond Courier AGVs can create a more rewarding work environment, raising engagement and lowering turnover.

- + Share responsibilities between man and machine to enhance productivity and overcome specific business challenges.
- + Transform skill sets by focusing on advanced knowledge tasks.
- + Empower employees by allowing them to manage the equipment now performing the manual tasks they once did.
- + Reduce the ergonomic impact of repetitive, physically demanding tasks.

<sup>\*</sup> Notes:

<sup>1.</sup> FMV lease estimate includes the following system items: (3) Automated Guided Vehicles, Courier 3020 Automated Tow Tractor class up to 10,000 lbs towing capacity | (1) Lead acid battery and (1) battery charger per AGV | Fleet management software site license | Standard Application Engineering and site implementation | Automation package warranty up to 5 years | Tech support for (5) years | Pedestrian and Operator training | EXCLUSIONS: Software integrations to 3rd party equipment, hardware or network infrastructure, custom engineering or implementation not included in pricing. These exclusions to be quoted on a time-material basis as required to meet customer's application.

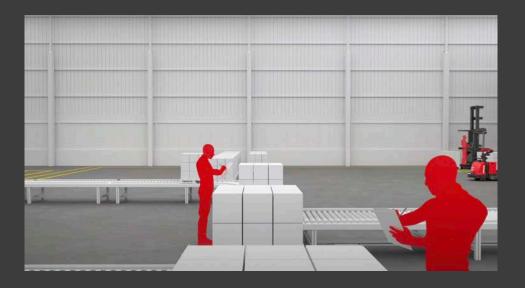
<sup>2.</sup> Courier Availability: 540 hours per month (30 days per month, 18 hours per day)

<sup>3.</sup> All lease offers as of January 2024 are subject to change and credit conditions

# PART OF AN INTEGRATED, AUTOMATED ECOSYSTEM

Beyond simply offering AGVs to help you automate specific applications, Raymond will look at your entire workflow to identify opportunities where automation may make sense, then recommend solutions with the greatest impact and benefits.

From the initial consultation through implementation, we'll design and build a complete, customized system around your material handling needs, facility, and workforce.



ONE COMPLETE, COLLABORATIVE AUTOMATION PARTNER
Consulting Services – Application Engineers – Automation
Systems Experts – Training – Service & Support



### ONE CUSTOMIZED, INTEGRATED SOLUTION

Raymond Courier AGVs – Fleet Management Software – Robotics – Carousels – Automated Storage & Retrieval Systems – 3rd Party Equipment – Warehouse Management System (WMS)

## OPTIMIZATION BEFORE AUTOMATION

Before introducing automation into your business, your warehouse and processes should first be analyzed and optimized. Raymond can help lay the groundwork for a successful implementation by introducing our unique Lean Management System, and by assessing everything from your facility layout and material flow to racking systems and labor force.

Through our consultative sales approach, we'll look at all aspects of your operation and provide a custom solution that optimizes every interaction between your associates, automated systems, and lift trucks. To assess your needs and better understand your business, we'll ask you to walk us through your process from receiving to shipping, taking into account considerations such as:

How many shifts do you run?

How many employees do you have per shift, and what are their roles?

How do you receive goods (pallets, cases, both)?

Are received shipments inspected?

What sort of loads are you shipping and to whom (individual units to end customers, pallets to retail stores, etc.)?

What are the load sizes of items to be stored (length, width, height, and weight of pallets)?

What are the dimensions and weights of items to be shipped (length, width, height, and weight of shipping cartons)?

Do you insert documents into shipping cartons?

# YOUR COMPLETE INTRALOGISTICS SOLUTIONS PARTNER

Raymond is your single source for complete intralogistics solutions – offering customers the technology and know-how needed to provide warehouse operations, distribution centers and manufacturing facilities with a competitive edge. Our innovative solutions can help you optimize, connect, and automate your operation to cut lead times, reduce waste, minimize downtime, and improve quality.

By combining industry expertise and lean management principles with advanced material handling equipment, intelligent warehouse technology, labor management tools, automation, and support services, we can provide tailored solutions that optimize your people, processes, and facilities, and drive your business forward.

### MATERIAL HANDLING CONNECTED TECHNOLOGY EQUIPMENT Telematics • Fleet & Warehouse Lift Trucks Optimization Systems **Energy Solutions** Labor Management System (LMS) Racking & Storage Picking Solutions Dock & Door • Operator Assist Technology Zoning & Positioning Conveyors & Carousels Pick2Pallet™ LED Light System Raymond Advance EAN MANAGEMEN. iW Integrated Tether System Location System • Real-Time Location System Object Detection & Notification Systems • iW FieldSense Proximity Notification System • In-Aisle Detection System RAYMOND INTRALOGISTICS SOLUTIONS **AUTOMATION** SUPPORT SERVICES Lean Management Operator Assist Technology Learning Programs LEAN MANAGEMEN **Automated Guided Vehicles** Data Analysis Conveyor Systems & Carousel **Engineering Services** Automated Storage & Retrieval Systems (AS/RS) • Opportunity Assessment, KPI Analysis & Robotics Identification, Report & Design Operations Consulting Material Handling Equipment Service & Maintenance Forklift Service & Maintenance Financing • Finance Programs Leasing Rentals

# RUN BETTER. MANAGE SMARTER.®

At Raymond, our aim is to deliver the utmost quality and to work for continuous improvement every day, in every aspect of our business. We are proud of what we build. We are proud of the level of service we provide to keep our customers' businesses up and running. We take pride in our commitment to our customers through our end-to-end approach in helping them find smarter, more efficient, and more effective solutions.

We value the trust that Raymond has earned through decades of proven performance and hands-on innovation. Since the patenting of the first hand pallet truck to the invention of the reach truck to our pioneering work in narrow aisle operations and beyond, Raymond has led the way in providing customers with the tools and expertise to improve their business.

IF YOU'RE LOOKING FOR A PARTNER WITH THE TOOLS AND EXPERIENCE TO HELP YOU RUN BETTER AND MANAGE SMARTER, LET'S TALK.

For more information or to see how Raymond Courier AGVs could help you take the next step on your journey to automation, please call 855-495-6697, contact your nearest Raymond Solutions and Support Center, or visit www.raymondcorp.com.

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