

GS1 Digital link

Unlocking Digital Intelligence in Every Code



What is GS1 digital link?

GS1 Digital Link is an advanced standard from **GS1**, the global non-profit behind the world's most widely used product and location identification systems. It upgrades barcodes by embedding a structured web link, turning each code into a gateway to rich, real-time content-like product info, instructions, certifications, promotions, or traceability data. Each scan becomes a chance to deliver relevant, contextual information, transforming how businesses connect with products and customers. This innovation boosts transparency, engagement, and integration across retail, healthcare, and manufacturing ecosystems.



Key Benefits:



• Boost consumer trust and interaction

Offer immediate digital access to reliable, up-to-date product information, including promotions, recall notices, and sustainability data.



• Greater traceability and visibility

Track products accurately at every stage of the supply chain—from manufacturing to the point of sale—ensuring full transparency.



• Streamlined operations

Combine multiple data elements into a single, intelligent barcode to reduce complexity and enhance efficiency in data management.



• Adaptable and ready for the future

Easily update content digitally without reprinting physical labels, staying compliant with changing regulations and market needs.



• Confident printing, every time

With GS1 Digital Link, quality control is simple. Validation tools ensure each code is printed clearly, consistently, and in full compliance.



• Accurate and validated data

GS1 standards guarantee structured and verified data, significantly improving accuracy and reliability throughout your supply chain.



• Flawless checkout performance

Built on trusted technology, GS1 Digital Link ensures fast and accurate scanning at checkout, improving customer experience and efficiency.



EXPIRATION DATE



DISCOUNTS



NUTRITIONAL VALUES



INGREDIENT TRACEABILITY



PLANT PRODUCTION AND
SUPPLY CHAIN DATA



LOT NUMBER

How GS1 Digital Link enhances Retail



Instant access to live digital content

Traditional barcodes offer limited information, affecting customer experience and support. GS1 Digital Link uses dynamic URLs to detailed content like ingredients, nutritional content, tutorials or certifications, without changing the packaging. This boosts transparency, allows real-time updates, and improves user experience.

Advanced tracking and targeted recall management

During a crisis like a product recall, it's vital to quickly isolate affected items. GS1 Digital Link embeds key data (e.g., lot numbers, expiry dates, serials) into product codes, which scanners send to traceability or ERP systems—enabling faster, more precise recalls, minimizing waste and disruption, and simplifying compliance.



Real-time product authenticity verification

To combat counterfeiting in sensitive sectors like pharmaceuticals, cosmetics, and luxury goods, a scanner reads the GS1 Digital Link and redirects to a unique, brand-generated URL to verify product authenticity and detect anomalies. This solution enhances consumer safety, reduces fraud risk, and ensures secure, verifiable traceability.

In-store consumer engagement

Connecting with consumers in-store is often difficult, weakening omnichannel efforts. GS1 Digital Link-enabled scanners make it easier by letting shoppers instantly access personalized offers, recipes, rewards, or videos directly from product packaging—enhancing engagement, loyalty, and the link between physical and digital channels.



Perishable item management

Traditional barcodes lack expiration info, making it hard to track near-expiry or expired items. With a GS1 Digital Link 2D code, customers get alerts at checkout about soon-to-expire items (with possible discounts) or are blocked from buying expired ones. Retailers can better manage stock, selling older items first and keeping expired products off shelves.

Centralized and simplified product data

Managing multiple versions of packaging or product sheets adds complexity, errors, and costs. A single, remotely updatable GS1 Digital Link provides centralized, consistent product data at the point of sale, adaptable by language, region, or channel—streamlining document management and boosting efficiency.



How GS1 Digital Link enhances Industrial Automation

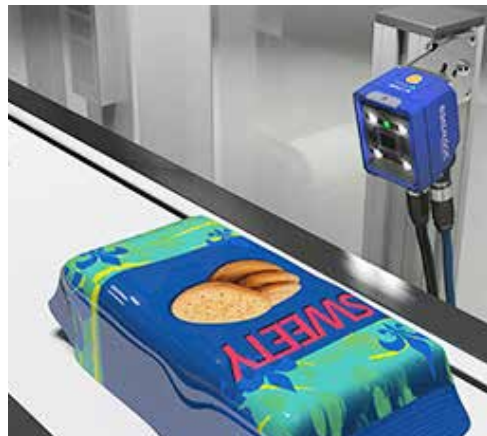


High-speed 2D barcode reading on production lines

High-speed production lines needed reliable 2D barcode reading for traceability and synchronization. Datalogic's scanners decoded GS1 Digital Link codes in real time—even on small or curved items—and sent data directly to the MES. The result: fast, accurate tracking and easy integration with automation systems.

Simultaneous barcode&text reading for check

A manufacturer needed to scan both a GS1 Digital Link 2D barcode and human-readable data (like lot number and expiry date) in one go to ensure packaging integrity. Both the code and text were captured and verified simultaneously, with mismatches flagged automatically. This led to dual product validation, reduced manual inspection time, and enhanced packaging traceability.

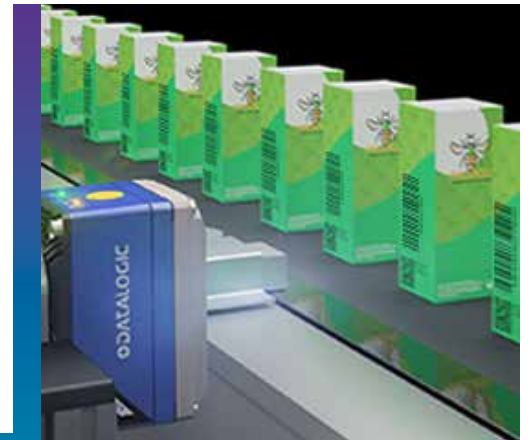


Barcode compliance and uptime check

Datalogic's Matrix scanners helped address inconsistent barcode quality that was causing read errors, production delays, and compliance risks. By continuously monitoring key parameters like contrast, alignment, and modulation, the scanners enabled real-time quality control. Automatic alerts allowed for immediate corrective actions without halting production, resulting in fewer read errors, less downtime, and full compliance with GS1 and ISO/IEC standards.

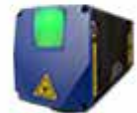
Linear barcode and 2D code position check

A manufacturer needed to verify packaging integrity by capturing both a GS1 Digital Link 2D code and human-readable data in a single scan. Both barcode and printed text were read and cross-checked in one pass, with mismatches flagged automatically. This enabled dual validation, reduced manual inspection time, and enhanced traceability.





Datalogic readiness for GS1 Digital Link


LASER MARKING


MACHINE VISION


STATIONARY INDUSTRIAL SCANNERS


HANDHELD SCANNERS


MOBILE COMPUTERS


FIXED RETAIL SCANNERS

INDUSTRIAL AUTOMATION

DATA CAPTURE

Boost traceability and transparency:
track every product with confidence, from factory floor to checkout counter.

GS1 Digital Link

FIXED RETAIL SCANNERS

Speed, transparency, and digital content at checkout



MOBILE COMPUTERS

Data capture + wireless connectivity in one



HANDHELD SCANNERS

Rugged, flexible, and precise for frontline use



STATIONARY INDUSTRIAL SCANNERS

For nonstop, high-speed environments



LASER MARKING & VISION SYSTEMS

Permanent 2D codes, real-time inspection, smarter manufacturing



Future-Proof Your Supply Chain

GS1 Digital Link is not just a standard.

It's a strategy.

Whether you're optimizing inventory, enabling smart logistics, or driving digital engagement, this standard ensures you're ready for what's next.

Get Started Today!



www.datalogic.com