

The GS20 Connectivity Gateway



Take production line throughput to the next level with next generation scan tunnel architecture

The GS20 is a powerful industrial connectivity gateway that enables a ground-breaking new scan tunnel architecture that substantially increases package tracking and sorting throughput. In today's typical scan tunnel, all cameras capture barcodes, process the data and send the processed data to the host — and one camera is designated as the leader, also responsible for coordination and communications with the other cameras in the tunnel. With the GS20 as a designated leader module, all connected cameras become single purpose devices, doing only what they were designed to do best — capture barcodes. With support for up to 16 cameras, the GS20 aggregates all captured scan data to quickly send only the information required by the host application.

The result? Processing inefficiencies are eliminated, enabling all of the cameras in your tunnels to achieve peak scanning capacity. And you achieve a maximum return on your scan tunnel investments.

In addition, the GS20 is simple to set up, deploy and manage — no coding or technical expertise required. And the rugged dustproof and waterproof design ensures dependable operation wherever you need a scan tunnel.

Take your throughput to the next level with next generation scan tunnel architecture. For more information, please visit www.zebra.com/gs20



Deploy the GS20 as an IP65 and IP67 rated scan tunnel leader to get the ultimate flexibility and control required to build the systems you need. Quickly setup and consolidate data from disparate devices, synchronize trigger and IO signals and send only the key data you need to a PC, PLC, MES or other host system.

Easy to set up

Game-changing scan tunnel architecture

Since all barcode data is now sent to the GS20, cameras no longer need to process data, providing three key benefits: setup is simplified, cameras can now achieve maximum scanning speeds and conveyor speeds are increased, improving throughput.

Intuitive web-based setup — no coding required

The integrated web-based HMI graphical interface lets administrators click their way through configuration of all aspects of the GS20, including processing of barcode data from all cameras.

Rich data filtering capabilities

The GS20 eliminates duplicate barcodes and extracts the desired data for the host application through string filters — specify an exact match of an entire string, or a match at the beginning, end or anywhere in the string.

Supports up to 16 cameras for superior coverage

Connects to more cameras than leading competitors for configuration flexibility — supports a variety of package sizes, regardless of label positioning.

Configure GPIO for all cameras in record time

With Automatic GPIO mirroring, setting up trigger mode for up to 16 cameras is as easy as setting up one — all I/O settings are then mirrored to all other cameras.

Multiple triggering modes

Choose the scanning mode that best meets the needs of your application — single shot, level, continuous or presentation.

Easy to deploy

Easy integration with your existing production lines and systems

Built-in support for Rockwell, Siemens, Mitsubishi and Omron PLC devices simplifies integration, reducing deployment time and cost.

Ultra-rugged and deployable practically anywhere

The aluminum housing is chemical and oil resistant. And with IP65 and IP67 sealing, the GS20 is dustproof and waterproof.

Mix and match models to meet your needs

The GS20 can connect to virtually any TCP/IP-enabled device, providing complete configuration flexibility. Scan tunnels can be configured with different camera models, and even handheld scanners and third party devices — a major competitive differentiator.

Flexible power options

Reduce setup complexity and cost with support for Power-over-Ethernet (PoE). This standard feature powers the GS20 and attached accessories right over the network, eliminating the cost of power drops and power supplies. And if you don't have a PoE infrastructure, no problem. You can also power the GS20 with a standard 24V DC power supply.

Shared accessory ecosystem

The GS20 utilizes the same accessory family as Zebra's Fixed Industrial Scanner family, simplifying purchasing, deployment and management.

Easy to run

Eliminates the need for a separate computer or additional software

Since all data processing is performed on the GS20, there's no need to purchase and manage a desktop computer or additional software.

Easily monitor your entire scan tunnel with Heartbeat+

View live performance of the GS20 leader and all follower cameras in an easy-to-read single status page. And alerts notify you immediately if a camera is disconnected.

Future proof your scan tunnels

No need to worry if the GS20 will be compatible with a newly installed next generation camera — the GS20 was designed to be compatible with most current and future Zebra fixed industrial scanners, as well as TCP/IP-enabled devices.

Complete support service — everything is covered

Get the constant peak performance and device uptime today's businesses demand with Zebra OneCare™ Essential and Select Support Services. Unexpected disruptions and unbudgeted repair expenses are eliminated. Everything is covered — including normal wear and tear and accidental damage. You can customize your support plan with numerous options to get the service level your business needs, including next-day delivery of a replacement device, on-site support, cloud-based visibility into your contracts, repair data, tech support cases — and more.

The GS20 Connectivity Gateway is compatible with nearly all current and future Zebra Fixed Industrial Scanners, plus any TCP/IP-enabled device, such as handheld scanners — and you can include any mix of compatible devices in the same configuration.



FS20

Compact networkable scanning for basic track-and-trace apps



FS40

Comprehensive features for sophisticated track-and-trace apps



FS70

Completely customizable to enable the most challenging track-and-trace apps

Specifications

Physical Characteristics	
Dimensions	1.1 in. H x 2.15 in. W x 3.71 in. D 28.3 mm H x 54.6 mm W x 94.3 mm D
Power	10 to 30 VDC external power supply; 7W max at 24V; Class 2 PoE, 7W
Configurable IO	(4) four opto-isolated GPIO; (2) two dedicated inputs (INO/INI), (2) two dedicated outputs (OUTO/OUTI)
Interface Ports	(1) One M12 X-Coded 1000/100/10 Mbps Ethernet (1) One M12 12-pin Power/GPIO/Serial
Communication Protocols	
Host to Leader	PLC (Siemens, Rockwell, Omron, Mitsubishi models), TCP/IP, Serial, GPIO
Leader to Followers	TCP/IP, GPIO
Follower Devices	Maximum Forward Continuous Current (IFM=70mA @ TA) Compatible with Zebra FS20, FS40, FS70 follower devices connected via TCP/IP and GPIO
User Environment	
Operating Temperature	32° F to 113° F/0° C to 45° C (duty cycle dependent)
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Humidity	5% to 90% RH, non-condensing
Vibration Resistance	EN 60068-2-6, 14 mm @ 2 to 10 Hz 1.5 mm @ 13 to 55 Hz; 2 g @ 70 to 500 Hz (2) two hours on each axis
Shock Resistance	EN 60068-2-27, 30g; 11 ms; (3) three shocks on each axis
Sealing	IP65 and IP67
Electrostatic Discharge	+/- 15 kV Air; +/- 8 kV direct/indirect contact

Regulatory	
Environmental	EN 50581:2012; EN IEC 63000:2018
Electrical Safety	IEC 62368-1 (Ed.2); EN 62368-1:2014/A11:2017
LED Safety	IEC 62471: 2006 (Ed.1) EN 62471: 2008
EMI/EMS	EN 55032:2015/A11: 2020 EN 55035:2017/A11: 2020 EN 61000-3-2: 2014 EN 61000-3-3: 2013 EN 61000-6-2: 2005 and 2019 FCC 47 CFR Part 15, Subpart B Canada ICES-003, Issue 7
EU Declaration of Conformity	2014/30/EU; 2014/35/EU; 2011/65/EU Refer to the Declaration of Conformity (DoC) for details of compliance to the current standards. The DoC is available at: zebra.com/doc
Warranty	
Subject to terms of Zebra's hardware warranty statement, the GS20 is warranted against defects in workmanship and materials for a period of (2) two years from the date of shipment. For complete warranty statement, please visit: www.zebra.com/warranty	
Accessories	
Brackets, cables, power supplies, external lighting accessories	
Recommended Services	
Zebra OneCare™ Select; Zebra OneCare™ Essential	



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