

Controller

Item		ZX-GTC11	ZX-GTC41
Output type		NPN	PNP
Measurement cycle ⁽¹⁾		1.5 ms (standard mode (NORM)) 0.5 ms (high-speed mode (FAST)) ⁽²⁾	
Samples to average		1/2/4/8/16/32/64/128/256/512/1024/2048/4096	
Analog output ⁽³⁾		For current output: 4 to 20 mA/F.S., max. load resistance 300 Ω For voltage output: ±4 V, (±5 V, 1 to 5 V ⁽⁴⁾), output impedance 100 Ω	
Timing input, bank switching input, zero reset input, reset input		ON: short-circuited with 0V or 1.5V max. OFF: Open (leakage current: 0.1 mA max.)	ON: short-circuited with power supply voltage or power supply voltage -1.5V max. OFF: Open (leakage current: 0.1 mA max.)
HIGH/PASS/LOW Judgment output ⁽⁵⁾ Sync output ⁽⁶⁾		NPN open-collector output 30 VDC 50 mA max. Residual voltage 1.2 V max.	PNP open-collector output 30 VDC 50 mA max. Residual voltage 2 V max.
Indicator		Judgment output indicator: HIGH (orange), PASS (green), LOW (orange) Main display (red) Sub-display (yellow) Bank 1/2 (orange), zero reset (green)	
Main functions	Number of registered setups	2 banks	
	Measurement Mode	Interrupted beam width measurement, incident beam width measurement, outer diameter measurement, center position measurement, IC lead pitch, IC lead width judgment, specified edge measurement, wire position measurement, glass edge position measurement	
	Display during measurement	Measured value, resolution, threshold, voltage output value, current output value (number of display digits can be changed)	
	Zero reset functions	Offset setting of zero reset value, zero reset value memory	
	Hold	Sample hold, peak hold, bottom hold, peak-to-peak hold, average hold, delay hold	
	Timer functions	ON delay, OFF delay, one-shot	
	Adjustment functions	Optical Axis adjust mode/light intensity writing mode, variable binary level, variable edge filter, analog output scaling	
	Calculation	2 Possible on up to two Controllers (Calculation Unit ZX-CAL2 is required for connecting Controllers to each other.) A-B, A+B, width	
	Other	Measurement cycle setting, threshold setting, hysteresis setting, initialization, key lock	
Temperature characteristic		±0.005%F.S./°C	
Current consumption		150 mA max. (including receiver)	
Power supply voltage		24 VDC +10%, -15% ripple (p-p) 10% max.	
Dielectric strength		1,000 VAC, 50/60 Hz for min	
Insulation resistance		20 MΩ (at 500 VDC megger)	
Ambient temperature		Operating: 0 to +50°C Storage: -15 to +60°C (with no icing or condensation)	
Ambient humidity		Operating and storage: 35 to 85% (with no condensation)	
Vibration resistance(durability)		10 to 150 Hz Single-amplitude: 0.35 mm for 80 min each in X, Y and Z directions	
Degree of protection		IEC60529 IP20	
Cable length		2 m	
Material		Case: PBT (polybutylene terephthalate), Cover: Polycarbonate	
Weight (packed state)		Approx. 330 g	
Accessories		Instruction Sheet	

*1: The first response time is "measurement cycle x (number of samples to average setting + 1) + 1 ms" max. For the second response time onwards, the specified measurement cycle time is output.
 *2: The response time in the high-speed mode (FAST) for the IC lead pitch and IC lead width judgment modes is 1 ms.
 *3: Current/voltage can be switched using the switch provided on the rear of the Controller.
 *4: Can be set by the analog output scaling function.
 *5: The error (ERR) state is displayed when all HIGH/PASS/LOW outputs turn OFF.
 *6: Normally, wire the sync output wire directly to the emitter's sync input wire and run the Controller in the standard mode. On an NPN type Controller, use an NPN type emitter, and on a PNP type Controller, use a PNP type emitter. Wiring of the sync wires is not required when the Controller is run in the high-speed mode.
 (Note, however, that the Controller becomes more susceptible to the influence of ambient light in this case.)

ZX-GT

Interface Unit

Item	ZX-GIF11/-GIF11A	ZX-GIF41/-GIF41A
Compatible Controller	ZX-GTC11	ZX-GTC41
Indicator	Power ON (green), Controller communications (orange), Controller communications error (red), RS-232C communications (orange), RS-232C communications error (red), binary output (orange)	
Communications port	RS-232C (9-pin D-sub connector)	
12-bit binary output (D11 toD0, GATE)	NPN open-collector output 30 VDC 20 mA max. Residual voltage 1.2 V max.	PNP open-collector output 30 VDC 20 mA max. Residual voltage 2 V max.
Power supply voltage	Supplied from Controller (power consumption: 60 mA max.)	
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min	
Insulation resistance	20 MΩ (at 500 VDC megger)	
Ambient temperature	Operating: 0 to +50°C Storage: -15 to +60°C (with no icing or condensation)	
Ambient humidity	Operating and storage: 35 to 85% (with no condensation)	
Vibration resistance(durability)	10 to 150 Hz Single-amplitude: 0.35 mm for 80 min each in X, Y and Z directions	
Degree of protection	IEC60529 IP20	
Cable length	RS-232C 0.5 m, binary output 2 m	
Material	Case: PBT (polybutylene terephthalate), Cover: Polycarbonate	
Weight (packed state)	ZX-GIF□1A: Approx. 550 g ZX-GIF□1: Approx. 330 g	
Accessories	ZX-GIF□1A: Setup Software (CD-ROM), 2 clamps, Instruction Sheet ZX-GIF□1: 2 clamps, Instruction Sheet	