

# EU Data Act

## Data specifications submitted by WPBD products

September 12, 2025



Panasonic Connect Co., Ltd.  
Welding Process Business Division  
Development Department

**This document presents the data that WPBD products can provide to comply with EU Data Act.**

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## Established / Revision history

Revision No.	Revision date	Revisions	Charge	Approval
0	September 12, 2025	First version is released.	Kitada	Yonemori

- Product Category : Welding power source
- Product Name : TIG Welding power source
- Product Number : YC-300BZ3YHD、YC-300BP2YAF
- Requirements of Data Submission : TIG Welding power source has to be connected to a Panasonic Robot Controller.
- Data to be submitted : See the table below

Data name	Unit	Number of bytes	Sampling Period (ms)
1 Output current	A	2	500
2 Output voltage	V	2	500
3 Welding error	—	3	Every time
4 Welding power source detection status	—	1	Every time

- Product Category : Welding power source
- Product Name : CO<sub>2</sub>/MAG/MIG Welding power source
- Product Number : YD-400VP1YHD
- Requirements of Data Submission : CO<sub>2</sub>/MAG/MIG Welding power source has to be connected to a Panasonic Robot Controller.
- Data to be submitted : See the table below

	<b>Data name</b>	<b>Unit</b>	<b>Number of bytes</b>	<b>Sampling Period (ms)</b>
1	Output current	A	2	500
2	Output voltage	V	2	500
3	Shot count	time	1	500
4	Motor current	A	1	500
5	Motor speed	rpm	2	500
6	Welding error	—	3	Every time
7	Welding power source detection status	—	1	Every time

- Product Category : Robot
- Product Name : G4 Controller
- Product Number : YA-2JA Series、YA-2KA Series
- Requirements of Data Submission : Various options have to be used.
- Data to be submitted : See the table below

Option Name	Part number	Function name	Data name	Unit	Sampling period
1 TAWERS Weld Data Management	YA-2KPYW1	Weld data recording	Current output	A	50us
			Voltage output	V	
			Wire speed	m/min	
			Program name	-	
			Position name	-	
			Error number	-	
			Weld speed	m/min	
			Command current	A	
			Current output	A	
			Command voltage	V	
			Voltage output	V	
			Shot count	time	
			Pulse frequency	Hz	
			Motor current	A	
			Wire speed	m/min	50ms
			Instant arc-lack time	ms	
		Weld data log	Program name	-	
			Position name	-	
			Command current	A	
			Command Ip	A	
			Command voltage	V	
			Weld speed	m/min	
			Current output	A	
			Voltage output	V	
			Shot count	time	
			Instant arc-lack time	ms	
			Motor current	A	
			Wire speed	m/min	
			Weld error	-	
			Deviation count	time	
			Each time a weld		

Option Name	Part number	Function name	Data name	Unit	Sampling period
31 Welding Data Log (General Welder)	YA-2JPWY2T01	Weld data log	Program name	-	Each time a weld
			Position name	-	
			Command current	A	
			Command voltage	V	
			Command lb	A	
			Command Ip	V	
			Weld speed	m/min	
			Current output	A	
			Voltage output	V	
			Shot count	time	
			Motor current	A	
			Wire speed	m/min	
			Weld error	-	
			Deviation count	time	
			Each time a weld		
45 Teaching Update Log	YA-2JPXC1	Teaching Update Log	-	-	For each change operation
			Opening a file	-	
			Saving a file with a new name	-	
			Command add	-	
			Command change	-	
			Command delete	-	
			Move command	-	
			Undoing an operation	-	
			Canceling an "UNDO" operation	-	
			Each time a weld		

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Option Name	Part number	Function name	Data name	Unit	Sampling period
54 Production Management Function	YA-2JPXD1	Auto Data Receiving	Accumulation	YY,MM,DD, hh, mm, ss	Every Request (min. 1 min)
			Error history	-	
			Alarm history	-	
			Production count	Measurement section unit	
			Operation time	YY,MM,DD, hh, mm, ss	
			Welding information : Production evet log	YY,MM,DD, hh, mm, ss	
			Log start	YY,MM,DD, hh, mm, ss	
			Work S/N	-	
			Weld line ID	-	
			Torch ON time	YY,MM,DD, hh, mm, ss	
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87	YA-2JPXD1	Auto Data Receiving	Torch OFF time	YY,MM,DD, hh, mm, ss	Each time a weld
			Program name	-	
			Weld start position	-	
			Log position	-	
			Wire amount	m	
			Arc retry count	time	
			Stick release count	time	
			Weld error	-	
			Command current	A	
			Command voltage	V	
			Weld speed	m/min	
			Current output	A	
			Voltage output	V	
			Shot count	time	
			Total instant arc lack time	ms	
			Feeder motor current	A	
			Wire speed	m/min	
			Arc monitor time	s	
			Arc time	YY,MM,DD, hh, mm, ss	
			MAG touch start	-	
			Deviation counts	time	
			Login User ID	-	
			Multi-cooperative robot state	-	
			Weld characteristics No.	-	
			Weld characteristics	-	

Option Name	Part number	Function name	Data name	Unit	Sampling period
88 Production Management Function	YA-2JPXD1	Operation information : Production evet log	Log start	YY,MM,DD, hh, mm, ss	Every Log Event
			Serial No.	-	
			Event type	-	
			Program name	-	
			Program start position	-	
			Log position	-	
			Error code	-	
			Error sub code	-	
			Average load factor	%	
			Peak load factor	%	
			Collision torque	%	
95 100 101 102 103 104 105 106 107 108 109	YA-2JPXD1	-	Any 10 variables	-	Every Log Event
			Running Time	s	
			Holding time in Auto mode	s	
			Error hold time in Auto mode	s	
			Servo OFF time in Auto mode	s	
			Idle time in Auto mode	s	
			Teaching time	s	
			Controller power ON time	s	
			Arc ON time in Auto mode	s	
			Downtime (Error)	-	
			Waiting time in Auto mode	s	
110 111 112 113 114 115 116 117 118 119	YA-2JPXE1	-	Air cut time in Auto mode	s	Every acquisition : 10 ms minimum
			Login User ID	-	
			Robot position data/Each axis data/Work coordinate data/Load factor for each axis	-	
			External axis angle data/Load factor (1-21)	-	
			Welding data (Set current, Actual current, Set voltage, Actual voltage, Wire speed, Feeder motor current)	-	
			Welding data for follower robot (Set current, Set voltage, Tool number, etc)	-	
			Status INPUT/OUTPUT data	-	
			User INPUT/OUTPUT data	-	
			GI variable (100 pcs.), GL variable (5 pcs.)	-	
			Time data (Accumulated program execution time, Accumulated power ON time, etc.)	-	

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Option Name	Part number	Function name	Data name	Unit	Sampling period
120	OPC UA server Function YA-2JPXK1	OPC UA for Robotics	Login user name	-	Every acquisition
121			Manufacturer	-	
122			Model name	-	
123			Serial number	-	
124			Firmware information	-	
125			Operation program information	-	
126			Manipulator	-	
127			Manufacturer	-	
128			Model number of manipulator	-	
129			Robot type	-	
130			Axis information/	-	
131			Axis type	-	
132			ParameterSet/	-	
133			Angle and so on	-	
134			Safety information	-	
135			ParameterSet/	-	
136			Emergency stop state	-	
137			Operation mode	-	
138			Protective stop	-	

Option Name	Part number	Function name	Data name	Unit	Sampling period
139	Thick Plate Welding Function YA-2JPMB1/C1	Thick Plate Event Log	File operation information (File Reset, Transfer, File Open/Close)	-	Every request
140			Operation information (start, restart, stop, direct go, etc.)	-	
141			Error code	-	
142			Weld Information (Multi-layer welding starts, Multi-layer pass shift, Multi-layer welding ends, Weld starts, Weld ends, Weld condition number)	-	
143			Weld start condition (current)	A	
144			Weld start condition (voltage)	V	
145			Weld start condition (speed)	m/min	
146			Weld start condition (timer)	s	
147			Weld end condition (weld confirmation timer)	s	
148			Weld end condition (Afterflow Timer)	s	
149			Start retry	-	
150			Operation after start (current)	A	
151			Operation after start (voltage)	V	
152			Operation after start (timer)	s	
153			Operation after start (speed)	m/min	
154			Joint (weaving pattern)	-	
155			Joint (amplitude)	m	
156			Joint (height)	m	
157			Arc sensor settings	なし	
158			Pass shift	m	
159			Weld end condition (current)	A	
160			Weld end condition (voltage)	V	
161			Weld end condition (speed)	m/min	
162			Start shift	m	
163	Touch Sensor Function YA-2JPWS1	Touch Sensor File(SLS)	Sensor number table	-	Every request
164			Sensor movement commands	-	
165		TSF	Touch sensor correction data	mm	Every request

End

- Product Category : Robot
- Product Name : G3 Controller
- Product Number : YA-1V/YA-1Y/YA-2D/YA-2F/YA-1W/YA-1Z/YA-2E/YA-2G Series
- Requirements of Data Submission : Various options have to be used.
- Data to be submitted : See the table below

Option Name	Part number	Function name	Data name	Unit	Sampling period
1 TAWERS Weld Data Management	YA-1TPWY2	Weld data recording	Current output	A	300us
2			Voltage output	V	
3			Wire speed	m/min	
4			Program name	-	
5			Position name	-	
6			Error number	-	
7			Weld speed	m/min	
8			Command current	A	
9			Current output	A	
10			Command voltage	V	
11			Voltage output	V	
12			Shot count	time	
13			Pulse frequency	Hz	
14			Motor current	A	
15			Wire speed	m/min	50ms
16			Instant arc-lack time	ms	
17		Weld data log	Program name	-	
18			Position name	-	
19			Command current	A	
20			Command Ip	A	
21			Command voltage	V	
22			Weld speed	m/min	
23			Current output	A	
24			Voltage output	V	
25			Shot count	time	
26			Instant arc-lack time	ms	
27			Motor current	A	
28			Wire speed	m/min	
29			Weld error	-	
30			Deviation count	time	

Option Name	Part number	Function name	Data name	Unit	Sampling period
31 Welding Data Log (General Welder)	YA-1UPWY2T01	Weld data log	Program name	-	Each time a weld
32			Position name	-	
33			Command current	A	
34			Command Ip	A	
35			Command voltage	V	
36			Weld speed	m/min	
37			Current output	A	
38			Voltage output	V	
39			Shot count	time	
40			Instant arc-lack time	ms	
41			Motor current	A	
42			Wire speed	m/min	
43			Weld error	-	
44			Deviation count	time	
45 Teaching Update Log	YA-1UPXC1	Teaching Update Log	-	-	For each change operation
46			File	-	
47			Edit	-	
48			Program edit	-	
49			Mode switch	-	
50			Resume	-	
51			User login	-	

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Option Name	Part number	Function name	Data name	Unit	Sampling period
52 Production Management Function	YA-1UPXD1	Auto Data Receiving	Accumulation	YY,MM,DD, hh, mm,ss	Every Request (min. 1 min)
			Error history	なし	
			Alarm history	なし	
			Production count	Measurement section unit	
			Operation time	YY,MM,DD, hh, mm,ss	
			Log start	YY,MM,DD, hh, mm,ss	
			Work S/N	-	
			Weld line ID	-	
			Torch ON time	YY,MM,DD, hh, mm,ss	
			Torch OFF time	YY,MM,DD, hh, mm,ss	
53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85	Welding information : Production evet log		Program name	-	Each time a weld
			Weld start position	-	
			Log position	-	
			Wire amount	m	
			Arc retry count	time	
			Stick release count	time	
			Weld error	-	
			Command current	A	
			Command voltage	V	
			Weld speed	m/min	
			Current output	A	
			Voltage output	V	
			Shot count	time	
			Total instant arc lack time	ms	
			Feeder motor current	A	
			Wire speed	m/min	
			Arc monitor time	s	
			Arc time	YY,MM,DD, hh, mm,ss	
			MAG touch start	-	
			Deviation counts	time	
			Login User ID	-	
			Multi-cooperative robot state	-	
			Weld characteristics No.	-	
			Weld characteristics	-	

Option Name	Part number	Function name	Data name	Unit	Sampling period
86 Production Management Function	YA-1UPXD1	Operation information : Production evet log	Log start	YY,MM,DD, hh, mm,ss	Every Log Event
87			Serial No.	-	
88			Event type	-	
89			Program name	-	
90			Program start position	-	
91			Log position	-	
92			Error code	-	
93			Error sub code	-	
94			Average load factor	%	
95			Peak load factor	%	
96			Collision torque	%	
97			Any 10 variables	-	
98			Running Time	s	
99			Holding time in Auto mode	s	
100			Error hold time in Auto mode	s	
101			Servo OFF time in Auto mode	s	
102			Idle time in Auto mode	s	
103			Teaching time	s	
104			Controller power ON time	s	
105			Arc ON time in Auto mode	s	
106			Downtime (Error)	-	Every acquisition : 10 ms minimum
107			Waiting time in Auto mode	s	
108			Air cut time in Auto mode	s	
109			Login User ID	-	
110 Robot Data Access Function	YA-1UPXE1	-	Robot position data/Each axis data/Work coordinate data/Load factor for each axis	-	
111			External axis angle data/Load factor (1-21)	-	
112			Welding data (Set current, Actual current, Set voltage, Actual voltage, Wire speed, Feeder motor current)	-	
113			Welding data for follower robot (Set current, Set voltage, Tool number, etc)	-	
114			Status INPUT/OUTPUT data	-	
115			User INPUT/OUTPUT data	-	
116			GI variable (100 pcs.), GL variable (5 pcs.)	-	
117			Time data (Accumulated program execution time, Accumulated power ON time, etc.)	-	

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Option Name	Part number	Function name	Data name	Unit	Sampling period
118	Thick Plate Welding Function	Thick Plate Event Log	File operation information (File Reset, Transfer, File Open/Close)	-	Every request
119			Operation information (start, restart, stop, direct go, etc.)	-	
120			Error code	-	
121			Weld Information (Multi-layer welding starts, Multi-layer pass shift, Multi-layer welding ends, Weld starts, Weld ends, Weld condition number)	-	
122	Welding Condition Setting File	Setting File	Weld start condition (current)	A	Every request
123			Weld start condition (voltage)	V	
124			Weld start condition (speed)	m/min	
125			Weld start condition (timer)	s	
126			Weld end condition (weld confirmation timer)	s	
127			Weld end condition (Afterflow Timer)	s	
128			Start retry	-	
129			Operation after start (current)	A	
130			Operation after start (voltage)	V	
131			Operation after start (timer)	s	
132			Operation after start (speed)	m/min	
133			Joint (weaving pattern)	-	
134			Joint (amplitude)	m	
135			Joint (height)	m	
136			Arc sensor settings	-	
137			Pass shift	m	
138			Weld end condition (current)	A	
139			Weld end condition (voltage)	V	
140			Weld end condition (speed)	m/min	
141			Start shift	m	
142	Touch Sensor Function	YA-1VPWS1	Touch Sensor File(SLS)	Sensor number table	-
143			Sensor movement commands	-	Every request
144		TSF	Touch sensor correction data	mm	Every request

End

- Product Category : Laser
- Product Name : (For Cutting) Direct Diode Laser Oscillator
- Product Number : YL-F40CA1E00、YL-F40C02T05、YL-F60C02T05、YL-F40D02Y05
- Data to be submitted : See the table below      note) Some models contain unused data. Output of unused data is “0”.

	<b>Data name</b>	<b>Unit</b>
1	Log data No.	-
2	year, month, day	year, month, day
3	hour, minute, second	hour, minute, second
4	Alarm No.	-
5	Input signal	-
6	Output signal	-
7	Oscillator temperature	0.01°C
8	Oscillator humidity	0.01%
9	Oscillator power voltage	0.01V
10	Water block temperature (Oscillator cooling water temperature)	0.01°C
11	Power on time	0.1sec
12	Cumulative oscillation time	0.1sec
13	Cumulative operation time	sec
14	LD temperature	0.01°C
15	Blade temperature	0.01°C

	<b>Data name</b>	<b>Unit</b>
16	Blade humidity	0.01%
17	Blade laser power	W
18	Blade safety relay operating factor	-
19	Blade PD (Photo Diode) output voltage	0.01V
20	Combiner temperature	0.01°C
21	Combiner humidity	0.01%
22	Combiner laser power	W
23	Combiner safety relay status	-
24	Combiner PD (Photo Diode) output voltage	0.01V
25	Guide laser PD (Photo Diode) output voltage	mV
26	FOM PD (Photo Diode) output voltage	mV
27	Alarm detail bits	-
28	Oscillator water pressure (IN)	0.001MPa
29	Oscillator water differential pressure (IN)	0.001MPa
30	Oscillator water flow rate	0.1L/min

- Product Category : Laser
- Product Name : LAPRISS
- Product Number, Oscillator : YL-F40AA\*、Robot System : YA-1VS\*
- Requirements of Data Submission : It is as follows.

- Use of the extra option (robot data access function)
- Connecting G3 controller and external device such as PLC via LAN line
- Development of data acquisition program using Modbus/TCP on external device
- The robot data update cycle is every 1200 ms for The Blade related data and every 100 ms for other data.
- The data acquisition cycle relies and is controlled by the external device.

-Data to be submitted : See the table below

Address	Data name	Unit	Address	Data name	Unit	Address	Data name	Unit
1 8500	Laser status	–	16 8515	Internal temperature	0.01°C	31 8530	Blade1_Laser output	W
2 8501	Laser command condition: Main (peak) power	W	17 8516	Internal humidity	0.01%RH	32 8531	Blade1_Safety relay	–
3 8502	Laser command condition: Base power	W	18 8517	Water pipe dew point temperature	0.01°C	33 8532	Blade1_Temperature/LD temperature1	0.01°C
4 8503	Laser command condition: Pulse frequency	Hz	19 8518	In-machine dew point temperature	0.01°C	34 8533	Blade1_LD temperature2	0.01°C
5 8504	Pulse width (Duty)	x100 value [%]	20 8519	Water pressure (IN)	0.001MPa	35 8534	Blade1_Ambient temperature	0.01°C
6 8505	Welding speed	0.01m/min	21 8520	Differential pressure	0.001MPa	36 8535	Blade1_Relative humidity	0.01%RH
7 8506	Start output factor	0~250%	22 8521	Flow rate	0.1L/min	37 8536	Blade1_Dew point temperature	0.01°C
8 8507	End output factor	0~250%	23 8522	Combiner Laser output	W	38 8590	Beam switch_safety relay	–
9 8508	ACC_stdrt_up Start-up slope time	0.0~5999.9ms	24 8523	Combiner Safety relay	–	39 8591	Beam switch_FOM PD CH1	mV
10 8509	DCC_end_down End down slope time	0.0~5999.9ms	25 8524	Combiner_Temperature	0.01°C	40 8592	Beam switch_FOM PD CH1 Low	mV
11 8510	ACC_cond_up Condition up slope time	0.0~5999.9ms	26 8525	Combiner_Relative humidity	0.01%RH	41 8593	Beam switch_FOM PD CH1 High	mV
12 8511	DCC_cond_down Condition down slope time	0.0~5999.9ms	27 8526	Combiner_Dew point temperature	0.01°C	42 8594	Beam switch_FOM PD CH2	mV
13 8512	Speed	0.01m/min	28 8527	Combiner_FOM PD	mV	43 8595	Beam switch_FOM PD CH2 Low	mV
14 8513	Primary supply voltage	0.01V	29 8528	Combiner_FOM PD Low	mV	44 8596	Beam switch_FOM PD CH2 High	mV
15 8514	Water pipe temperature	0.01°C	30 8529	Combiner_FOM PD High	mV			



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