

TECHNICAL INFORMATION SHEET – NUMBER 172

SERIES 2000 EI BISYNC MNEMONICS AND MODBUS IDS

9/9/96



ISSUED BY THE APPLICATIONS ENGINEERING DEPARTMENT

JBUS EI BISYNC DESCRIPTION

Note: Modbus addresses would be Jbus +1

1	PV	Process Variable
2	SL	Target Setpoint <Comms Only>
3	OP	Output Power
4	WO	Working Output
5	SP	Working Setpoint
6	XP	Proportional Band PID1
7	CA	Direct Acting Control Flag
8	TI	Integral Time PID1
9	TD	Derivative Time PID1
10	CH	Heat Cycle Time
11	QC	Setpoint Minimum
12	QB	Setpoint Maximum
13	A1	Alarm 1 Setpoint
14	A2	Alarm 2 Setpoint
15	SS	Internal Setpoint Select
16	HC	Heat Cool Deadband
17	LB	Cutback Low PID1
18	HB	Cutback High
19	RG	Relative Cool Gain PID1
20	C2	Cool Cycle Time
22	PN	Current Program Running
23	PC	Program Status
24	S1	Setpoint One
25	S2	Setpoint Two
26	RI	Remote Input Comms access parameter
27	LT	Local Setpoint Trim
28	MR	Manual Reset
29	CS	Current Segment Type
30	HO	High Power Limit
31	LO	Low Power Limit
32	RH	Remote High Power Limit
33	RC	Remote Low Power Limit
34	BP	Sensor Break Power
35	RR	Setpoint Rate Limit
36	TS	Segment Time Remaining
37	OR	Output Rate Limit (%/second)
38	PE	Pyrometer Emmisivity
39	ER	Error
40	BO	OnOff Sensor break output power
41	rS	Setpoint Rate Limit Holdback Status
45	MH	Heat channel Minimum On Time
47	n5	Alarm 1 Hysteresis



JBUS	EI BISYNC	DESCRIPTION
48	P2	Proportional Band PID2
49	I2	Integral Time PID2
50	M2	Manual Reset PID 2
51	D2	Derivative Time PID2
52	G2	Relative Cool Gain PID2
55	xI	Integral Output
56	SN	Current Segment Running
58	TP	Program Time Remaining
59	CL	Program Cycles Remaining
65	rH	Setpoint Rate Limit Holdback Value
66	TH	Local Setpoint Trim High Limit
67	TL	Local Setpoint Trim Low Limit
68	n6	Alarm 2 Hysteresis
69	n7	Alarm 3 Hysteresis
70	rT	Setpoint Rate Limit Holdback Type
71	n8	Alarm 4 Hysteresis
72	Gn	Current PID set
73	El	Error Logged Flag
74	FS	Modbus Fast Status byte
75	SO	Summary Output Status Word
76	CW	Control Status Word (internal copy)
77	IW	Instrument Status Word (internal copy)
79	Ss	PDSIO SSr Status
80	LI	Load Current
81	A3	Alarm 3 Setpoint
82	A4	Alarm 4 Setpoint
83	lt	Loop Break Time
84	FM	Forced Output Power
85	OO	On Off Control Output
86	HH	Heat Hysteresis
88	hc	Cool Hysteresis
89	MC	Cool channel Minimum On Time
90	CP	Brabender Proportional Band
91	CD	Brabender Cool Deadband
92	st	Slave Instrument Target Setpoint
93	sr	Slave Instrument Ramp Rate
94	ss	Slave Instrument Sync signal
95	sh	Remote SRL Hold
97	FP	Feedforward Proportional Band
98	FO	Feedforward Offset Value
99	FD	Feedforward Trim Limit
100	TR	DRA Trigger value
101	Tc	PV Time Constant
107	V0	Instrument Version Number
111	HS	Setpoint 1 High Limit
112	LS	Setpoint 1 Low Limit
113	H2	Setpoint 2 High Limit
114	L2	Setpoint 2 Low Limit
116	xD	Derivative Output
117	lb	Cutback Low PID2
118	hb	Cutback High 2
122	II	Instrument Ident
131	Ad	Comms address
133	SM	SPC Maximum PV
134	Sm	SPC Minimum PV



JBUS	EI BISYNC	DESCRIPTION
135	SA	SPC Mean PV
138	ST	PV Threshold for Timer Log
139	St	SPC Time above TimeTrigger
140	SR	SPC reset
144	Lh	Linear Correction High
145	Ll	Linear Correction Low
147	GO	access mode goto
149	V1	Mask Software Version Number
150	Pa	access mode security code
151	RP	DIN rail remote par
152	Pc	Configuration Homebase List Header
160	CT	Current segment target SP
161	CR	Current segment ramp rate
162	PO	Current Logic Output
163	PS	Programmer setpoint
199	IM	Instrument Mode
201	mt	Maximum Control task time
202	mv	ADC Converter millivolts
203	t1	PV Millivolts from Comms
204	t2	CJC Temperature from Comms
205	IE	Input test point enable
206	t3	Sensor Break sourced from Test
207	Fi	Filter Initialization Flag
214	xP	Proportional Output
215	t5	CJC Temperature
216	Lc	RT Lead resistance
218	Lr	Lead Resistance for thermocouple inputs
219	ds	DRA State
257	FC	Freeze Control flag
258	sb	Sensor break status flag
259	PF	Power Failed Flag
262	BT	PID debump flag
263	Lb	Loop Break Status Flag
264	IH	Integral Hold Status Flag
268	FT	Initialization flag
270	AT	Autotune Enable
271	AA	Adaptive Tune enable
272	DT	Automatic Manual Reset Calculation Enable
273	mA	Manual Mode
274	AK	Acknowledge All Alarms
275	Ra	Setpoint Rate Limit Active Status
276	rE	Remote Setpoint Enable
277	Rc	SRL Complete Status
278	HD	Holdback Disable
279	DK	All UI keys disable
280	RF	Remote input status
281	SC	Sync continue flag
282	DM	Enable diagnostic messages
501	uj	Programmer Prog List Header
502	uc	cms list header
504	ug	Atune list header
505	uf	op list header
506	ua	Alarm List Header
507	ub	Setpoint List Header
508	ud	PID List Header



JBUS	EI BISYNC	DESCRIPTION
509	ue	Programmer Run List Header
510	ui	Input list header
511	uh	info list header
512	Q0	Control Type Configuration
514	QI	Access Mode User Password
515	QK	Configuration Mode user password
516	Q1	Instrument Units
517	pt	Programmer Type
518	pp	Power fail action type
520	ps	Servo Option
524	Q9	Non Linear Cool Type
525	QD	Display resolution
526	QE	Remote Tracking
527	QF	Manual Track
528	QG	Programmer Track
529	QH	Control Time Units
530	mk	Manual Key Disable
531	QJ	SRL Rate Units
532	QO	Feedforward Type
533	Cn	Calibration Node select
534	Ci	PV Calibration State
535	QA	Remote Setpoint configuration
536	n1	Alarm 1 Type
537	n2	Alarm 2 Type
538	n3	Alarm 3 Type
539	n4	Alarm 4 Type
540	n9	Alarm 1 Latch configuration
541	na	Alarm 2 Latch configuration
542	nb	Alarm 3 Latch configuration
543	nc	Alarm 4 Latch configuration
544	nd	Alarm 1 Block configuration
545	ne	Alarm 2 Block configuration
546	nf	Alarm 3 Block configuration
547	ng	Alarm 4 Block configuration
548	QL	Maximum Input value in Engineering Units
549	QM	Minimum Input Value in Engineering Units
551	dt	Digital Output Telemetry Parameter
552	QN	Setpoint Span
553	QP	Sensor Break Type configuration
555	QQ	Bumpless PD control configuration
556	QR	Forced Manual Enable switch
557	SY	Synchronization mode
558	NO	Programmer digital outputs enable
559	FR	Fast run option
560	QS	Transducer Scaling High Point Offset
561	QT	Transducer Scaling Low Point Offset
562	QU	Transducer Scaling High Point
563	QV	Transducer Scaling Low Point
564	pk	Run/Hold Key Disable
565	Pe	Power Feedback Enable
601	J1	Custom Linearization Input 1
602	J2	Custom Linearization Input 2
603	J3	Custom Linearization Input 3
604	J4	Custom Linearization Input 4
605	J5	Custom Linearization Input 5



JBUS	EI BISYNC	DESCRIPTION
606	J6	Custom Linearization Input 6
607	J7	Custom Linearization Input 7
608	J8	Custom Linearization Input 8
621	K1	Custom Linearization Output 1
622	K2	Custom Linearization Output 2
623	K3	Custom Linearization Output 3
624	K4	Custom Linearization Output 4
625	K5	Custom Linearization Output 5
626	K6	Custom Linearization Output 6
627	K7	Custom Linearization Output 7
628	K8	Custom Linearization Output 8
12290	Q2	Linearization Type
12291	Q3	CJC Type
12300	Q6	Input Scale High Limit
12301	Q7	Input Low Scalar
12304	Q4	Input Range High Limit
12305	Q5	Input Low Range
12352	k0	Fixed Module LA Ident
12355	k3	Fixed Module LA Slot Function
12416	l0	Logic Input B Ident
12419	l3	Logic Input B Slot function
12430	le	Module LB High Scalar
12431	lf	Logic Input LB Low Scalar
12480	g0	Fixed Module AA Ident
12483	g3	Fixed Module AA Slot function
12486	g6	Summary OP AA Configuration
12489	g9	Summary OP AA invert
12503	gn	Program Summary OP AA Configuration
12544	h0	Interface Module H Ident
12547	h3	Interface Module H Slot function
12548	h4	Baud Rate
12549	h5	Comms Parity
12550	h6	Comms Resolution
12608	j0	Interface Module J Ident
12611	j3	Interface Module J Slot function
12621	he	Module H High Scalar
12622	hf	Module H Low Scalar
12623	jf	Module J Low Scalar
12672	a0	Module 1A Ident
12673	a1	Module 1B Ident
12674	a2	Module 1C Ident
12675	a3	Module 1A Slot function
12676	a4	Module 1B Slot function
12677	a5	Module 1C Slot function
12678	a6	Summary OP 1A Configuration
12679	a7	Summary OP 1B Configuration
12680	a8	Summary OP 1C Configuration
12681	a9	Summary OP 1A invert
12682	aa	Summary OP 1B invert
12683	ab	Summary OP 1C invert
12684	ac	Output 1A units current/Volts
12685	je	Module J High Scalar
12686	ae	Module 1A Hi Value
12687	af	Module 1A Low Value
12688	ag	Module 1A High Output range



JBUS	EI BISYNC	DESCRIPTION
12689	ah	Module 1A Low Output range
12690	ai	Module 1A High Input range
12691	aj	Module 1A Low Input range
12692	ak	Module 1A Output Calibration High Trim
12693	al	Module 1A Output Calibration Low Trim
12694	am	DC Output 1A Telemetry Parameter
12695	an	Program Summary OP 1A Configuration
12696	ao	Program Summary OP 1B Configuration
12697	ap	Program Summary OP 1C Configuration
12698	aq	Module 1C Hi Value
12699	ar	Module 1C Low Value
12736	b0	Module 2A Ident
12737	b1	Module 2B Ident
12738	b2	Module 2C Ident
12739	b3	Module 2A Slot function
12740	b4	Module 2B Slot function
12741	b5	Module 2C Slot function
12742	b6	Summary_OP 2A Configuration
12743	b7	Summary_OP 2B Configuration
12744	b8	Summary_OP 2C Configuration
12745	b9	Summary_OP 2A invert
12746	ba	Summary_OP 2B invert
12747	bb	Summary_OP 2C invert
12748	bc	Output 2A units current/Volts
12750	be	Module 2A Hi Value
12751	bf	Module 2A Low Value
12752	bg	Module 2A High Output range
12753	bh	Module 2A Low Output range
12754	bi	Module 2A High Input range
12755	bj	Module 2A Low Input range
12756	bk	Module 2A Output Calibration High trim
12757	bl	Module 2A Output Calibration Low Trim
12758	bm	DC Output 2A Telemetry Parameter
12759	bn	Program Summary OP 2A Configuration
12760	bo	Program Summary OP 2B Configuration
12761	bp	Program Summary OP 2C Configuration
12800	c0	Module 3A Ident
12801	c1	Module 3B Ident
12802	c2	Module 3C Ident
12803	c3	Module 3A Slot function
12804	c4	Module 3B Slot function
12805	c5	Module 3C Slot function
12806	c6	Summary_OP 3A Configuration
12807	c7	Summary_OP 3B Configuration
12808	c8	Summary_OP 3C Configuration
12809	c9	Summary_OP 3A invert
12810	ca	Summary_OP 3B invert
12811	cb	Summary_OP 3C invert
12812	cc	Output 3A units current/Volts
12814	ce	Module 3A Hi Value
12815	cf	Module 3A Low Value
12816	cg	Module 3A High Output range
12817	ch	Module 3A Low Output range
12818	ci	2nd PV Module High Input range
12819	cj	Module 3A Low Input range



JBUS	EI BISYNC	DESCRIPTION
12820	ck	Module 3A Output Calibration High Trim
12821	cl	Module 3A Output Calibration Low Trim
12822	cm	DC Output 3A Telemetry Parameter
12823	cn	Program Summary OP 3A Configuration
12824	co	Program Summary OP 3B Configuration
12825	cp	Program Summary OP 3C Configuration
65535	EP	Comms edit program number