Product. Name: CPU
Product. Code: Saksham CPU XXXX

Rev.: 00

In The Realm Of Industrial Automation The Programmable Logic Contriller Reigns Supreme Orchestrating Complex Machinery And Processes With Precision And Reliability At The Heart Of Every Plc Lies Its Central Processing Unit Cpu The Varitable Brain Of The Operation The Cpu Is Responcible For Executing The User Programmed Logic Interpreting Instruction And Controlling The Plc S Behavior This Involves Reading Input Signals From Sensors Processing Data And Generating Output Signals To Control Actuators And Other Devices The Cpu Manages The Plc Memory Storing Programs Data And System Perameters It Ensures Efficient Alloctaion And Access To Memory Resources Optimizing Performance And Preventing Data Corruption Modern Plcs Often Feature Communication Capabilities Allowing Them To Interact With Other Devices Networks And Hmis The Cpu Manages These Communication Protocols Ensuring Seamless Data Exchange And Control To Maintain System Reliability The Cpu Incorporates Self Diagnostic Functions It Continuously Monitor Its Own Operation And That Of Other Plc Components Detecting Potential Issues And Alerting Maintenance Personnel The Performance And The Reliability Of A Plc Are Heavily Dependent On The Capabilities Of Its Cpu A Powerful Cpu With Ample Memory And Advanced Featues Can Handle Complex Control Tasks Optimize System Performance And Enhance Overall Productivity.

General Information

Product	Saksham CPU XXXX
Hardware Functional Status	From Jul22
Firmware Version	1.00.001
Firmware Update Possible	Yes
Engineering Software	Codesys
Display	No
Control Element Keys	No
Mode Button	No

Function

I&M Data	Yes, I&M0 TO I&M3
Isochronous Mode	Yes
Configuration Control Via Data Set	Yes

Power Supply	
Normal Voltage	24 Vdc
Low Voltage	18 5 Vdc
High Voltage	28 5 Vdc
Reverse Polarity Protection	Yes
Supply Failure Stored Energy Time	1 Sec
Repeat Rate	1/S
Rated Input Current	1 Amp
Maximum Input Current	1.5 Amp
Inrush Current Max	2.0 Amp
Power	10 W
Power Loss	4.8 W

Memory	
Number Of Slot For Memory Card	1
Memory Card Required	As Per Requirements
Integrated Work Memory For Program	1 Mb
Integrated Work Memory For Data	128 Mb
Plug In Memory Card Maximum	32 Gb

Blocks	
DB (Number Range-Maximum Size)	1 Mb
FB (Number Range-Maximum Size)	1 Mb
Fb (Number Range-Maximum size)	1 Mb
OB Maximum Size No Of Free Cycle No Of Time Alarm No Of Delay Alarm No Of Cyclic Interrupt No Of Process Alarm No Of DPV1 Alarm No Of Isochronous Mode No Of Technology Synchronous Alarm No Of Startup No Of Asynchronous Error No Of Synchronous Error No Of Diagnostic Alarm	 1 Mb 100 20 20 20 50 2 2 2 100 4 1 1

Counter	
Quantity	2048
Adjustable	Yes

Timer	
Quantity	2048
Adjustable	Yes

Data Area	
Retentive Data Area	256 Kb
Extended Retentive Data Area	256 Kb

Flag	
Maximum size	16 Kb
No Of Clock Memory	8 Kb

Data Block	
Retentivity Adjustable	Yes
Retentivity Preset	No

Local Data	
Per Priority Class Maximum	64 Kb

Address Area	
No. of Module	1024
IO address Area Inputs Outputs	 32 kb 32kb
Integrated Io Subsystem Inputs Outputs	 8kb 8kb
CM/CP Inputs Outputs	 8kb 8kb
Maximum No. Of Sub Process Images	32

Hardware Configuration

No Of Distributed Io Systems	32
No Of Dp Master With Cm	4
No. Of IO controller Integrated CM	 1 4
Rack No.Of Modul Per Pack No. Of Lines	 8 8

Time And Date

Clock Type Backup Time Deviation Per Day	 Hardware Clock 365 Days 10 Sec
Operating Hours Counter	16
Clock Synchronization Supported In Mater in Slave On Ethernet	 Yes Yes Yes Yes

Interfaces

No. Profinet /Modnet Interface	1
Interface Type Ethernet(RJ-45) No. Of Ports Integrated Switch	 Yes 2 Yes
Protocols IP Protocols Modnet IO Controller Modnet Io Device Profinet Io Controller OPC Web Server Media Redundency	 Yes Yes Yes Yes Yes Yes Yes
Profinet Modnet Io Controller Serices Pg Op Communication Isocronous Mode Direct Data Exchange IRT Prioritized Startup No Of Connectable Io Device For Rt Updating Time	 Yes Yes Yes Yes Yes 128 Minimum Valve For Updating Time Is Depends - On Communication Load
Update Time for IRT Send Cycle Of 250 ns Send Cycle Of 500 ns Send Cycle Of 1 ns Send Cycle Of 2 ns Send Cycle Of 4 ns	 250 ns To 4ms 500 ns To 8ms 1ms To 16ms 2ms To 32ms 4ms To 64ms

Update Time for RT	
Send Cycle Of 250 ns	250 ns TO 128 ms
Send Cycle Of 500 ns	500 ns TO 256 ms
Send Cycle Of 1 ns	1ms TO 512 ms
Send Cycle Of 2 ns	2 ms TO 512 m
Send Cycle Of 4 ns	4 ms TO 512 ms
Profinet Modnet Io Device Services	
Pg Op Communication	Yes
Isochronous Mode	No
IRT	Yes
Profienergy	Yes
Shared Device	Yes
Maximum No Of Io Controller With Shared Device	4
Activation Deactivation Of IO Devices	Yes
Asset Management Record	Yes

Type Of Interfaces

RJ-45 Ethernet	
100 MBPS	Yes
Autonegotiation	Yes
Autocrossing	Yes
Industrial Ethernet Status Led	Yes

Function

Max No Of Login Stations For Message Function	32
Program Alarm	Yes
No Of Configurable Program Messages	5000
No Of Loadable Program Message In Run	2100
No Of Simultaneously Active Program Alarms	
No Of Program Alarms	600
Alarm For System Diagnostic	100
Alarm For Moton Technology Objects	80

Supported Technology Objects

Motion Control	Yes
Compact Pid Control	Yes
Feed Forward Pid Control	Yes
Temperature Pid Control	Yes
High Speed Counter	Yes

Ambient Condition	
Horizontal Installation Min	0 Degree Celcius
Horizontal Installation Max	60 Degree Celcius
Vertical Installation Min	0 Degree Celcius
Vertical Installation Max	60 Degree Celcius

Ambient Condition During Storage Or Transportation	
Minimum	0 Degree Celcius
Maximum	50 Degree Celcius

Programming Language	
Ladder Logic	Yes
FBD	Yes
CFC	Yes
SFC	Yes
STL	Yes
SCL	Yes

Protection	
Program Protection Password Protection	Yes
Copy Protection	Yes
Block Protection	Yes
Protection Of Confidential Configuration Data	Yes
Write Protection	Yes
Read Write Protection	Yes
Complete Protection	Yes

Measurnment Data	
Dimension(W x H x D)	25 x 122 x 115
Weight	250g Approx