

Cat-No: IG-P06080200G/L

RTU Specifications:

- 32 bit RSIC processor
- Real Time Clock with Crystal Chip 32KHz Frequency
- 1Mb memory (Application & Logic)
- Power-up 10-30VDC auto ranging
- Digital Inputs – 06 channel (O/P Configurable)
- Digital Outputs – 08 channel
- Analog Inputs – 02
- I/O expansion up to 32 nodes of any-mix
- Total expandable I/O shall be up to 80 any mix
- Expansion speed supported is 114 kbps
- GPRS port embedded
- GPRS supports 4G with fall back to 2G
- RS-485 Port (Modbus-RTU)
- Digital Inputs Interrogation Voltage is 12VDC
- Digital Outputs
- Digital Input Freq. 2Khz per channel
- Math functions, Algorithms, PID Loop can be built-into.
- Complex logics execution shall be effortlessly routed thru.
- Scan time shall be depending on program overhead.
- I/Os are Isolated
- Entire board is conformal quoted for better life
- Mini-USB programming port
- Antenna Port embedded
- Link down phenomenon RTU shall hold the data and transmit the same in pre-specified format for 600 scan cycles on observing link restore scenario.
- Optionally GPRS can be replaced with LoRa wireless module using a concentrator.
- Power Consumption scenarios:
 - Idle : 0.5W @ 12VDC - Max: 4.2 W @ 12VDC - (Load) 1AI, 2DI, 2DO: 0.6W @ 12VDC



Target Industry Segments & Verticals:

- Irrigation: Outlet Management System, Distributed Management System & Air Management Systems
 - Sewage Treatments Plants / Chemical & Pharmaceutical Plants, Telemetry Applications

Technical Datasheet

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High Performance RTU

10-30VDC Operating Voltage	DC +
	DC -

12-24VDC 06 Inputs 1KHz Common Isolated	DI/P1 (+)
	DI/P1 (-)
	DI/P2 (+)
	DI/P2 (-)
	DI/P3 (+)
	DI/P3 (-)
	DI/P4 (+)
	DI/P4 (-)
	DI/P5 (+)
	DI/P5 (-)
	DI/P6 (+)
	DI/P6 (-)

4-20mAmps Analog Inputs	AI/P1 (+)
	AI/P1 (-)
	AI/P2 (+)
	AI/P2 (-)

Note:
Add-on modules can be installed to an farthest distance of 1.25kms. Combination of I/O modules shall be 4/6/8 channels which are configurable as combo I/O also.

Potential Free Contacts 08 Outputs	DO/P1 (NC)
	DO/P1 (C)
	DO/P2 (NC)
	DO/P2 (C)
	DO/P3 (NC)
	DO/P3 (C)
	DO/P4 (NC)
	DO/P4 (C)
	DO/P5 (NC)
	DO/P5 (C)
	DO/P6 (NC)
	DO/P6 (C)
	DO/P7 (NC)
	DO/P7 (C)
	DO/P8 (NC)
	DO/P8 (C)

Add-On Card Provision	Aux DC (+)
	Aux DC (-)
	RS-485 A
	RS-485 B

Communication Ports (GPRS / LoRa)	USB for Data download
	DIP Switch for Data download
	GPRS 4G/2G-LoRa

SCADA open protocol interface is possible using IriGoicS gateway unit without Inputs & Outputs. Industry standard Serial (RS-485) & Ethernet -IP or Modbus TCP/IP protocols are supported.

System Requirements for Logic Software

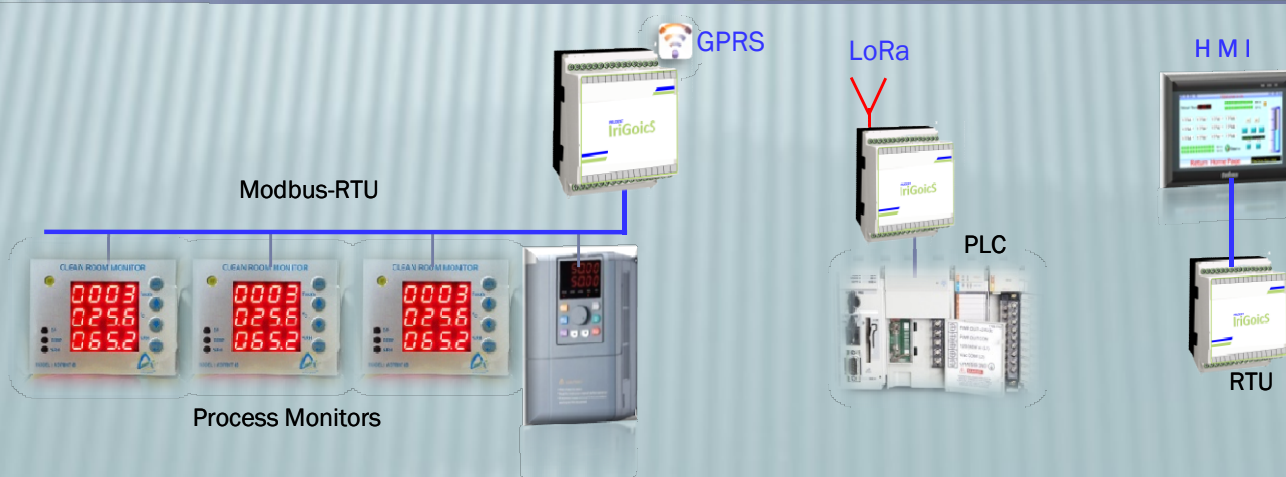
- Windows Version: Microsoft Windows-10 & above
- Processor: I7 or higher
- RAM: 16GB
- Hard Drive: 500GB SSD
- Display Resolution: 2560 x 2048
- Display Colours: >512
- Programming Port: USB
- USB Keyboard & Mouse: Required



Functional	Data
Program Capacity	64Kb (Firmware)
Total Program Memory	1Mb (Application + Ladder)
Execution Speed	Clock Speed 20MHz
	Modbus RTU 9600-19200
	Word Length 8
	Parity None
Clock Calendar	Stop Bits 1
	Year, Month, Day, Hour, Minute, Second & Day of the week

Environmental	Data
Temperature	-10°C to 55°C
Humidity	Upto 95%
Vibration Immunity	IEC 60068-2-6
Shock Immunity	IEC 60068-2-27
Dimensions (HxWxD)	110 x 90 x 23 (in mm)
Isolation between Comm Ports	Isolation between communication ports, power and I/O is 500 V DC for 1 Min.

EMI/EMC	Standards
Immunity to ESD	EN61000-4-2
Fast Transients	EN61000-4-4
Radiated Electromagnetic field	EN61000-4-3
Conducted Disturbances	EN61000-4-6
Surge	EN61000-4-5
Radiated Emission	EN61000-4-4

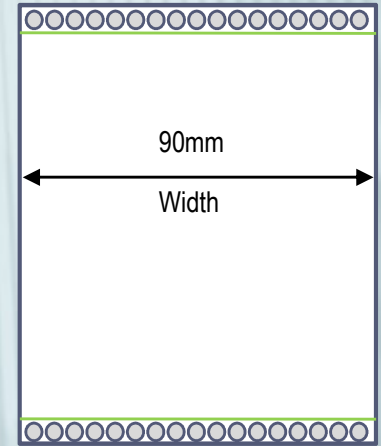
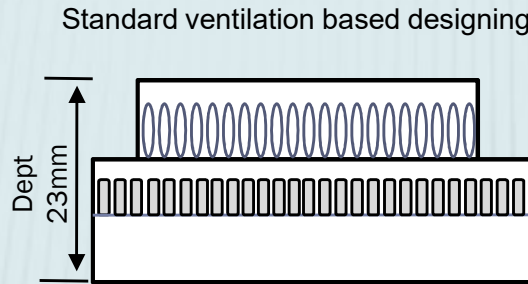
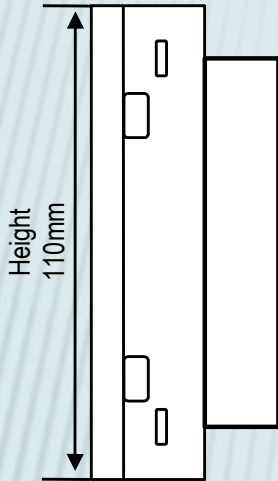


RTU Dimensions (mm)

Technical Datasheet

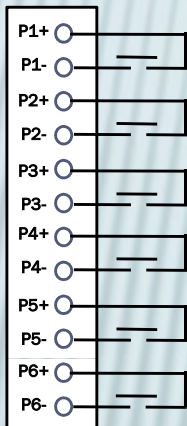
Rugged DIN Channel arrangement

High Grip Terminal Strip

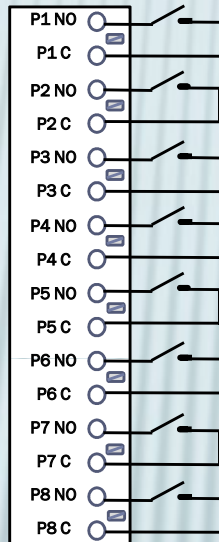


Sample I/O wiring details (10-30VDC source)

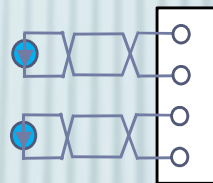
Digital I/P



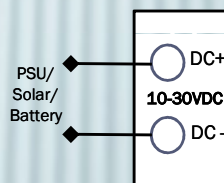
Digital O/P



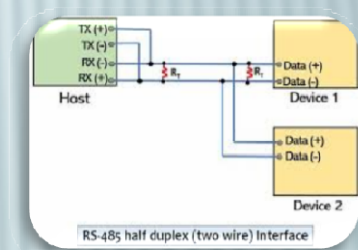
Analog I/P



Power Source
(10-30VDC)



Communication
RS-485 Serial



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