New Product Release

Extended 5 year Warranty

Argus Telemetry

Reliability

Flexibility

Compatibility

BIS Technologies
Voice communication

Sales and Support +33 2 4165 5722

Argus Overview

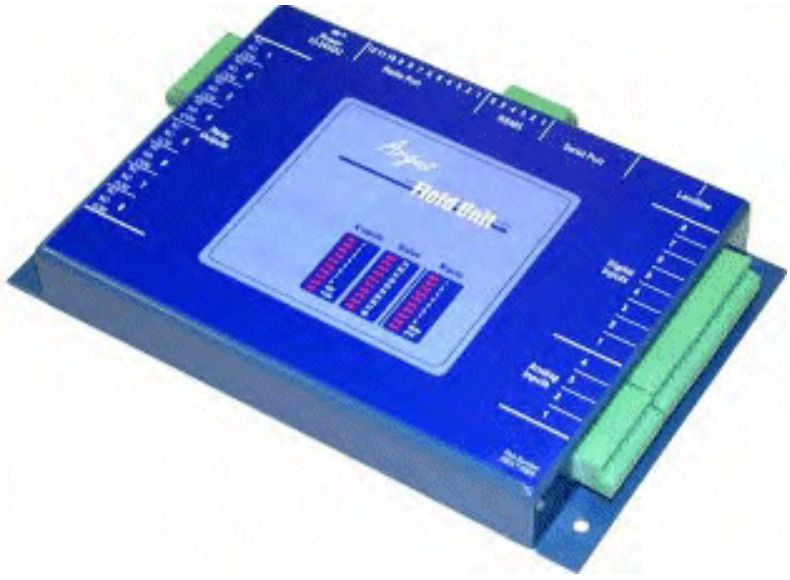
Argus is the New Family of Telemetry Units from BISS Technologies that build on the highly effective and reliable 9000/9200 Series Remote Terminal Units (RTU's). Argus represents a natural progression to a more sophisticated range of products, drawing on BISS Technologies' experience over many years of broad applications.

Each member of the Argus Family shares the following features

- A high performance 16-bit microprocessor with re-programmable Flash program memory and battery backed-up RAM
- Multiple simultaneous communications ports
- Multiple communications options (Radio, RS232, RS485, Landline)
- A software architecture that is based on a hierachical (network) structure
- Powerful communications software that provides integrated radio, PSTN and PLC access
- Protocol drivers that support event reporting with store and forward over radio;
- MODBUS access to SCADA systems and PSTN/GSM modems
- Real-time clock
- Remote access and user configurability

Argus Field Unit

A low cost, high value member of the Argus Family. The field unit comes as a small pre-packaged RTU with an optional built-in radio.



Hardware Features

- 16-bit CPU
- 512KB Flash ROM
- 128KB batttery backed-up RAM
- UHF Radio(optional)
- Serial communications port configurable for RS232/485
- V23 FSK modem with landline interface
- 8KB EEPROM
- Real-time clock
- 8 opto-isolated digital inputs
- 4 analog inputs
- 8 relay outputs

Basic Specifications

Power Consumption	200mA Idle 1.5A on transmit 10-28V DC Range
Size - Field Unit - Expansion Unit	210 x 133 x 28mm (H) 210 x 133 x 60mm (H)
Communications	Internal/External Radio 2 Ports: Radio & RS232/RS485 (link selectable) Radio 1200 Baud

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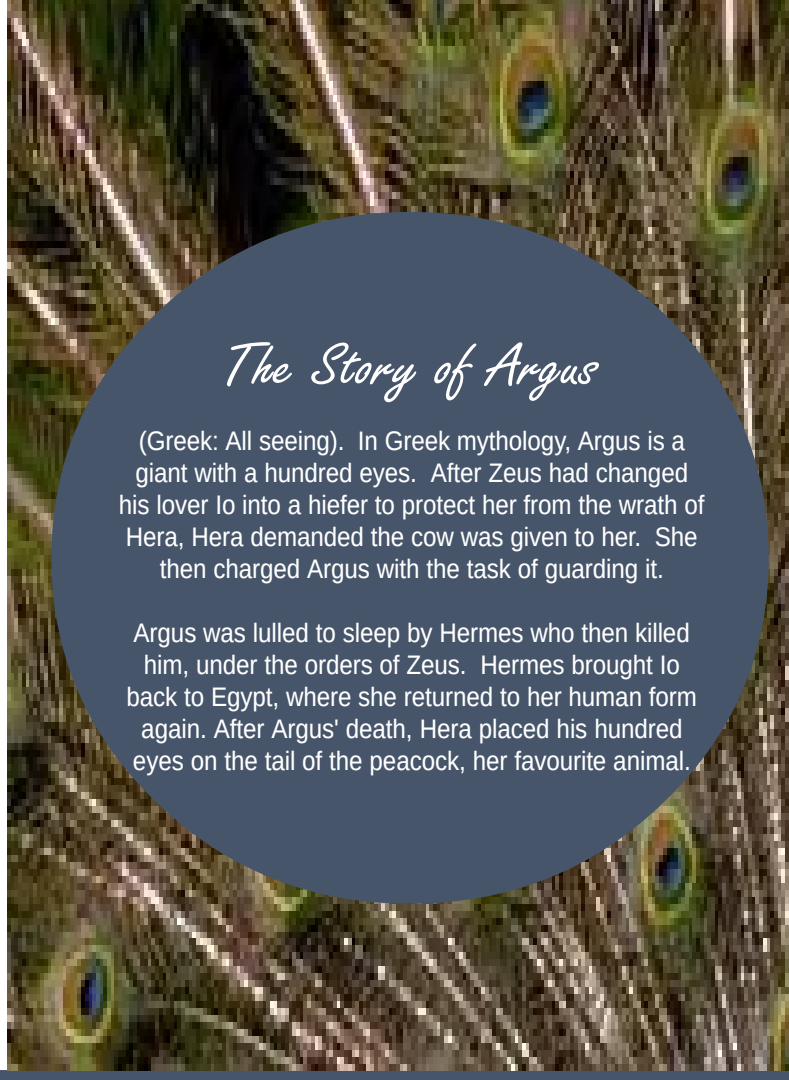
Argus
Field Unit Expansion Options

The Argus field unit can be easily upgraded with additional I/O capabilities at very little cost. The innovative design means that the additional ports and radio are accommodated in the same enclosure, allowing an extremely compact installation

Hardware Features

- Capable of two expansion cards for maximum flexibility
- Each expansion card can have up to:
  - 8 digital inputs (opto-isolated)
  - 8 relay outputs
  - 8 analog outputs (8-bit resolution)
  - 4 analog outputs (12-bit resolution)
  - 8 analog inputs (8-bit resolution)



The Story of Argus

(Greek: All seeing). In Greek mythology, Argus is a giant with a hundred eyes. After Zeus had changed his lover Io into a hiefer to protect her from the wrath of Hera, Hera demanded the cow was given to her. She then charged Argus with the task of guarding it.

Argus was lulled to sleep by Hermes who then killed him, under the orders of Zeus. Hermes brought Io back to Egypt, where she returned to her human form again. After Argus' death, Hera placed his hundred eyes on the tail of the peacock, her favourite animal.

Argus
Max I/O

The Argus Max I/O provides the highest functionality in the range. The Max I/O replaces the BISS Technologies 9200 Series RTU and also offers additional features for complex and large scale telemetry applications

Hardware Features

- 16-bit CPU
- 512KB Flash ROM
- 256KB batttery backed-up RAM
- 3 serial communications ports
- V23 FSK modem with radio interface, RS-232/422/485
- 8KB EEPROM
- Real-time clock
- 19" rack mount
- Expandable with combinations of 9200 Series compatible digital and analog input, relay output and analog output cards

Basic Specifications

Size	590mm x 285mm x 220mm (H)
Communications	Radio Landline RS232/RS485 1,200-19,200 Baud
Power Consumption	400mA max (for basic configuration)

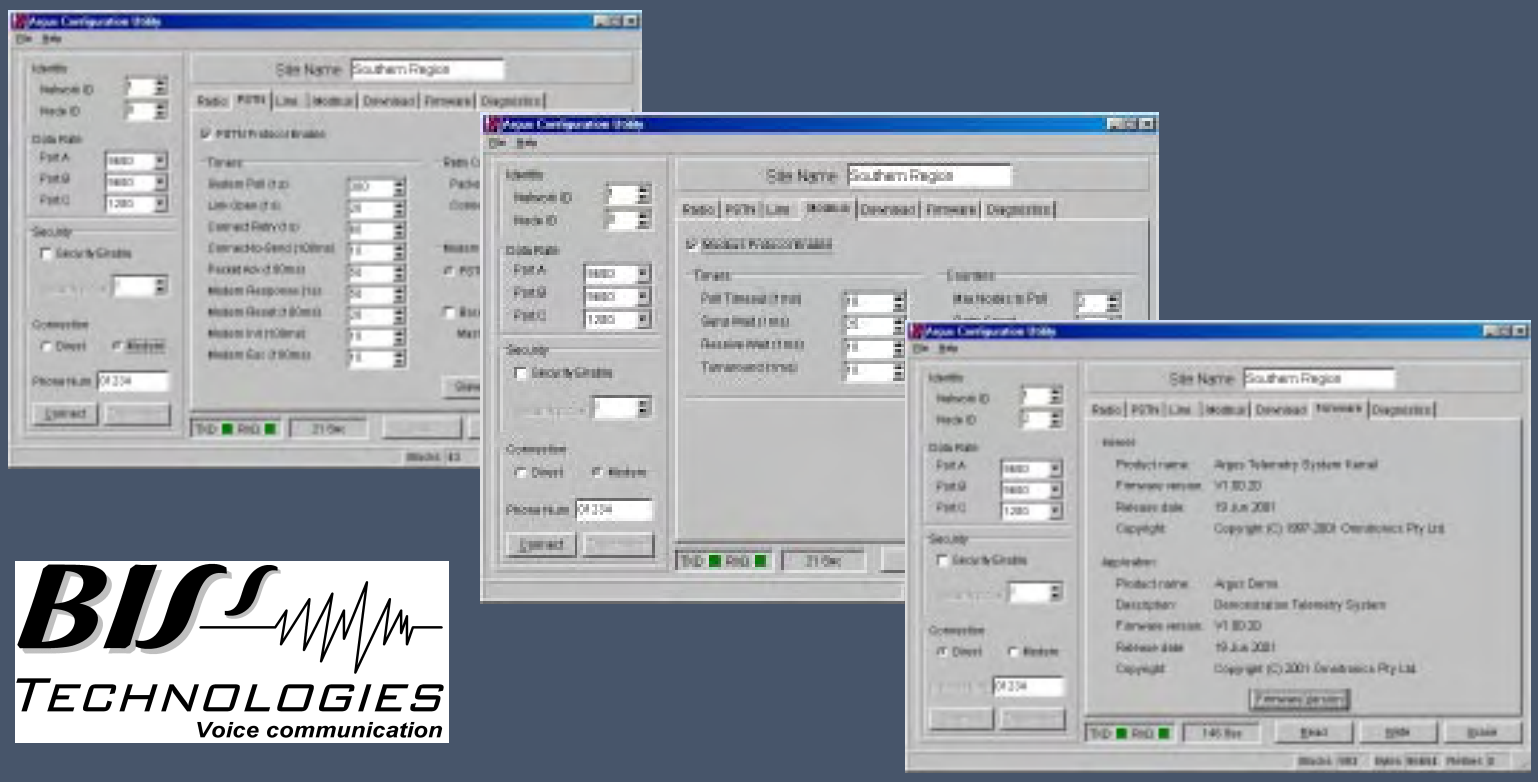
Cost-effective, efficient and reliable communications...

Argus Hardware

Features	Advantages	Benefits
A high performance 16-bit microprocessor with re-programmable Flash program memory and battery backed-up RAM	■ Faster I/O scan times ■ Service a large number of I/O points ■ Perform complex monitoring and control functions ■ Software can be re-programmed in the field ■ Supports data logging	■ Users can configure larger telemetry systems ■ The RTU can be made to perform PLC like functions
Multiple commmunication ports	■ Run multiple protocols simultaneously	■ A master RTU can connect to multiple nodes using combinations of radio and PSTN communications ■ A SCADA system can be used to monitor or control the RTU network
Multiple commmunication options (landline, radio, RS-232, RS-485)	■ Interfaces to radios, data modems, SCADA computers, data loggers ■ Supports different transmission mediums	
The software architecture is based on a hierarchical (network) structure	■ Allows creation of networks and sub-networks ■ Enables communications across different mediums ■ Allows the creation of a telemetry system with 250 networks, each supporting 250 RTU's	■ Data can be routed through different networks such as UHF, radio and PSTN ■ Users can design networks with regional hubs and central control
Powerful communications software that provides integrated radio, PSTN and PLC access	■ Enables access to RTU data through multiple links	■ Utilises the best available medium of communications to any outstation
Protocol drivers that support event reporting with store and forward over radio		
MODBUS access to SCADA systems and PSTN/GSM modems		
Real-time clock	■ Provides the ability to time stamp events ■ Schedule activities according to the time of the day	■ Can be used to reduce power ■ Provides an accurate time record of events
Remote access and user configurability	■ Software can be modified in the field ■ RTU parameters can be modified in the field ■ Programming can take place over an existing link (ie. over the air)	■ New programs can be downloaded in minutes from a PC to the target RTU ■ Operational parameters can be changed by the client in real-time

Argus Software

Features	Advantages	Benefits
Event reporting software for data over voice radio	■ Allows telemetry data to be sent over a voice radio channel ■ Transmissions are minimised to an exception basis	■ Cost savings by utilising existing voice networks ■ Ensures telemetry traffic is minimised Prevents annoying audible telemetry update tones ■ Minimises power consumption
Background (interleaved) polling	■ Prevents the master from monopolising the radio network at critical poll intervals	■ Improves communications reliability
Store and foreward capability over multiple paths	■ Any RTU can route a packet for another RTU that is not in direct communication with the master	■ Cost savings by using the RTU as a repeater instead of installing a dedicated radio repeater
Master poll option with fast ENQ/ACK protocol for dedicated radio networks or landlines	■ Ensures that each RTU in a network will receive service	■ Provides the highest reliability in critical applications
Modbus communications in single slave or pre-processor mode for SCADA or PLC access	■ Provides a standard mechanism to control and monitor the RTU network from a third party device ■ Enables the use of a customisable graphical user interface	■ Allows the user to peek into the telemetry network when required ■ Provides a gateway to the telemetry network for Citect, Wizcon or any other MMI package that uses Modbus
PSTN or GSM operation in standard or backup mode with external modems		■ Useful for RTUs that are not accessable through radio or landlines ■ Provides a backup mechanism for communications
Single memory map accessible by all protocols	■ Data may be exchanged by different protocols	■ Provides seemless integration for the client ■ Facilitates the use of other protocols to suit client applications
Security Option		■ Prevents unauthorised control of RTU outputs



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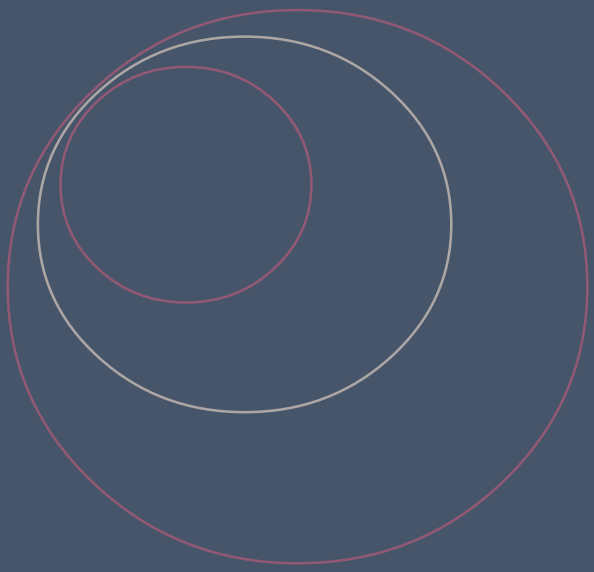

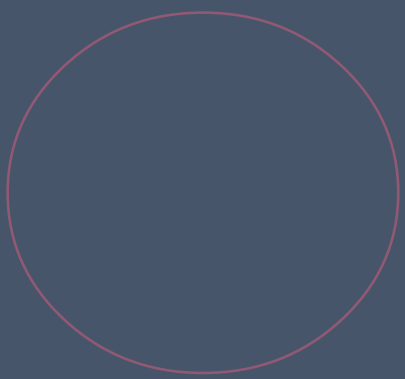

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