



Your Quick Guides to:

Solutions for Industrial Communications and IIoT



The World's No.1 choice for Connectivity

HMS Networks is the leading independent supplier of solutions for industrial communication and the Industrial Internet of Things, IIoT.



Anybus[®]
Any Device, Any Network



Ewon®

Industrial Remote Solutions

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Your Quick Guide to: Embedded Industrial Networking

Anybus 40 Series

Embedded Solutions

Features:

- Provides an effective solution for integrating an industrial network capability into your devices
- Available in three formats: Chip - Brick - Module
- Offers a wide range of different protocols
- Fully supported project working with our team of experts
- Software development is the same for all formats
- Keep up with the latest standards at no cost

Benefits:

- You can keep a minimal stock of your device but still offer a wide range of industrial networks
- HMS Networks keeps the protocols in line with the latest standards with no cost on your part
- The common software development for Anybus saves repeated development and therefore money
- The module version offers a fast time to market and a quicker return on investment

Anybus CompactCom



Key Considerations:

- Are you still developing protocol support 'in-house'?
- Do you want to drastically reduce the development costs and time to market?
- Do you have internal networking expertise?
- Do you want to be able to offer the latest in networking technology?

Contact your local representative for further information



View our Case Study:

Discover how Flexicon have benefited from implementing Anybus CompactCom for multi- network connectivity anybus.com/about-us/case-studies







Your Quick Guide to: Gateway Connectivity Solutions

Anybus Device Gateways

Features:

- Support for all major industrial fieldbus and Ethernet protocols
- Easy connectivity to PLCs for slave devices such as VFDs, process instruments, sensors, weighscales, barcode scanners, ASCII displays
- Convert custom serial protocols to industrial standards

Benefits:

- Increase sales opportunities across different network installations
- Allows you to use the best device for the job
- Reduces objections to your product offering due to network incompatibility
- Upgrade to new technology at your own pace

Most popular part numbers:

AB7072: Serial devices to EtherNet/IP

AB7013: Serial devices to PROFINet

AB7000: Serial devices to Profibus

AB7318: CAN devices to EtherNet/IP

AB7800: Profibus devices to EtherNet/IP

AB9006: Modbus TCP devices to EtherNet/IP

AB7306: CANopen devices to EtherNet/IP

AB7670: EtherNet/IP devices to PROFINet



Anybus Communicator Serial & CAN Gateway



Anybus X-gateway Network Master



Anybus X-Gateway **CANopen** Master



Anybus X-gateway Modbus TCP Master

Key Considerations:

- How do you manage communications between different manufacturers' devices?
- Has protocol incompatibility restricted your choice of device supplier?
- Have you had to upgrade existing parts purely due to new controllers using a different protocol?



Select the two network interfaces you require **INSIDE** your Gateway









Your Quick Guide to: Gateway Connectivity Solutions

Anybus Linking Devices

Features:

- Easy integration of Serial, Modbus TCP and **Profibus Devices into Rockwell systems**
- Custom Add-On Profile for Studio 5000 Logix Designer and RSLogix 5000 V20
- No generic Ethernet device configuration or EDS file import required
- Supports beacon based Device Level Ring (DLR)

Benefits:

- Easy integration saves time and money
- Simplified integration of 3rd party devices into CompactLogix™ and ControlLogix™ controllers with AOP-driven interface
- Reduced data documentation for 3rd party devices via automatic tag creation
- Upgrade existing systems to use Rockwell **PLCs**

Most popular part numbers:

HMS-EN2SE-R: Serial Linking Device HMS-EN2MB-R: Modbus TCP Linking Device HMS-EN2PB-R: Profibus Linking Device

EtherNet/IP*



Anybus Ethernet/IP Linking Device for serial protocols

Anybus Ethernet/ IP Linking Device for Modbus TCP servers (devices)





Anybus Ethernet/IP Linking Device for Profibus devices

Key Considerations:

- How difficult is it for you to integrate 3rd party devices into your Rockwell controllers?
- How do you manage the lack of data transparency when converting between Rockwell and devices using other protocols?



TechTalks from HMS Networks:

Stay up to date on the latest trends in the world of automation and IoT. Learn from HMS industry experts.

hms-networks.com/tech-talks







Your Quick Guide to: Gateway Connectivity Solutions

Anybus Machine Gateways

Features:

- Support for all major industrial fieldbus and Ethernet protocols
- Connectivity for OPC UA and MQTT bridging the IT/OT divide
- Support for all major automation vendors
- Certified by the protocol conformance bodies

Benefits:

- Save money by connecting machinery to any network without needing to alter the control system
- Make machinery IIoT ready with minimal effort

Most popular part numbers:

AB7649: EtherNet/IP to PROFINet AB7832: EtherNet/IP to Profibus AB7839: EtherNet/IP to Modbus RTU AB7632: EtherNet/IP to Modbus TCP AB7650: PROFINet to Modbus TCP AB7570: PROFINet to IIoT

AB7634: Modbus TCP to Profibus



Anybus X-Gateways

Key Considerations:

- How do you share data between different manufacturers' PLCs and control systems?
- How do you enable network connectivity between existing equipment and new systems?
- How will you make links between machine networks and data applications in the IT world?



Select the two network interfaces you require **INSIDE** vour Gateway

anybus.com/products/gateway-index







Your Quick Guide to: Factory floor to IT Connectivity

Anybus .NET Bridges

Features:

- Transfer production KPI parameters from the factory to the office
- Send data from custom PC applications to
- Send production recipe changes from a windows application to the factory floor PLC

Benefits:

- Real-time data from PLCs without interfering with critical applications
- IT departments can work in the familiar .NET environment but get data from industrial fieldbus networks
- Industrial communications layer and protocols handled by Anybus gateway
- OT side uses prebuilt definition files (GSD, GSDML, EDS, ESI) saving time and money during commissioning

Most popular part numbers:

AB9078: Anybus EtherNet/IP to .NET Bridge

AB9079: Anybus EtherCAT to .NET Bridge

AB9077: Anybus PROFInet to .NET Bridge

AB9071: Anybus Profibus to .NET Bridge



Anybus .NET Gateways

Key Considerations:

- Do you need to get production data from the OT environment into the IT environment?
- Are you worried that data processing will slow down your PLC process?
- Do your IT team need to work with unfamiliar industrial protocols to acquire process data?



HMS - Industrial IoT Blog

Stay up to date with the latest technical developments and trends within industrial communication and IoT Learn more here: hms-networks.com/about/blog







Your Quick Guide to: Wireless Connectivity Solutions

Anybus Wireless Bolt

Wireless Machine

Features:

- IP67 and UL Type 4X housing for tough environments
- Easy client installation through M50 cutout
- Integrate mobile machinery in plant with scalable Access Point and Client solutions
- Visualise machine data on any computing platform
- Web GUI for simple configuration
- PoE or terminal block for easy wiring & power
- White option to reduce solar heating effect

Benefits:

- Reduced installation time through quick fit design
- Reduce the infrastructure costs of laying cables when reconfiguring plants
- Save time and money through the quick installation method
- Safely service machinery outside guarding limits and control panels

Most popular part number:

AWB2030: Wireless Bolt w/ PoE

AWB2000: Wireless Bolt w/ 18-pin header

AWB2031: Wireless Bolt w/ PoE, white top





Key Considerations:

- How will you network mobile machinery such as Automated Guided Vehicles (AGV) in your factory?
- How do you plan to implement platformindependent visualisation of machine data?
- How will you allow machine programmers to make software changes in a safe manner?



View our Case Study:

INFUSER: Disinfection robot has robust wireless access via Anybus Wireless Bolt anybus.com/about-us/case-studies







Your Quick Guide to Wireless Connectivity Solutions

Anybus Wireless Bridge

Wireless Cable

Features:

- · Replace Ethernet cabling in hard to reach or hazardous locations
- IP65 for tough environments
- Antenna and radio in housing for flexible installation outside panel enclosure
- Reduce time to integrate modular machinery

Benefits:

- IP65 enables the bridge to be used in a wide range of environments
- All components bundled for easy ordering and application
- Reduce machine downtime due to cable
- Integral antennae reduces installation time and cost
- Fast set up for lower installation costs

Most popular part numbers: WB3003-B: Wireless Cable Kit

Anybus Bridge











Two Wireless Bridges + Cables

= Wireless Cable Kit

Key Considerations:

- How much downtime do you attribute to physical media failure?
- What is your cost for replacing cables in harsh environments?
- How do you overcome slip ring failure on rotating machinery?



Whitepaper:

For Best Practices for choosing the Wireless Technology for your application anybus.com/wireless-whitepaper







Your Quick Guide to:

Industrial Wireless Infrastructure

Anybus Switches

L2 Unmanaged & L3 Managed Switches

Features:

- 8 gigabit ethernet & 4 SFP ports (L3)
- Advanced routing capabilities (L3)
- Dual power supply for redundancy (L2 & L3)
- Ultra-low Power saving mode (L2 & L3)
- SNMP & Port mirroring for monitoring (L3)
- Port Access Control (L3)

Benefits:

- High data speeds
- Built in redundancy avoids data loss (L3)
- Reduced down time due to dual PSU (L2 & L3)
- Robust design (L2 & L3)
- Energy Efficient design saving money (L2 & L3)
- High level of data security protecting your data (L3)
- 3 year warranty

Most popular part numbers:

AWB5001: L2 Unmanaged Switch AWB5011: L3 Managed Switch

Anybus L2 Unmanaged Switch





Anybus L3 Managed Switch

Key Considerations:

- Do you need high data speeds?
- Are you looking for high availability?
- Is a long warranty important to you?
- Do you need a physically robust product?



Keep your HMS Products Healthy & Secure:

Register to keep your products protected & up to date hms-networks.com/firmware







Your Quick Guide to: Industrial Wireless Infrastructure

Anybus Wireless Routers

ITF & WI AN

Features:

- Global LTE coverage with one product
- WAN to LTE redundancy
- Security features such as VPN & firewall
- Alarms for wired connections.
- 2.4 & 5 GHz (WLAN version)

Benefits:

- Connect your machine in areas difficult to cable using WLAN
- Connect your machine over LTE from remote locations
- Provides high data security giving confidence in the solution
- High specification products at competitive pricing
- 3 vear warrantv

Most popular part number:

AWB5221: Anybus Wireless Router



Key Considerations:

- Do you need permanent connections to remote sites?
- Are you required to provide high security connections?
- Do you need a mix of LTE & WLAN?
- Do you need a physically robust product?



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Your Quick Guide to: Remote Access to PLCs & other devices

Cosy 131

Remote Access Gateway

Features:

- Secure VPN connectivity
- Key switch controlled "on-site"
- Two factor authentication & connection audit trails
- Easy commissioning without local connection
- Firewall friendly outbound connection
- · High availability via Talk2M secure cloud service

Benefits:

- · Remote commissioning and support of networked devices and systems
- Secure VPN & two-factor authentication provides high level of confidence with security
- Key switch gives total control over when remote access is allowed
- "Outbound connectivity" concept is secure and reduces commissioning problems saving time and money





Ewon was voted #1 for Remote Access by Engineers

Key Considerations:

- · Are you still sending engineers to site and at what cost?
- Do you want to drastically reduce support costs and maximise machine up-time?
- How can you guickly connect to and troubleshoot your remote machines?
- Do you want to reduce commissioning time and costs?

Most popular part numbers:

EC61330: Cosy 131 Ethernet EC6133C: Cosv 131 WiFi EC6133G: Cosy 131 4G (EU) EC6133D: Cosy 131 3G+

Secure Remote Access for Industrial Machines



Download your free 2nd edition EBook now: dummies.ewon.biz







Your Quick Guide to: Remote Data Solutions

Flexy 205

Remote Data Industrial Gateway

Features:

- Data acquisition from all major PLC suppliers
- · Data logging and retrieval (HTTPS, MQTT or FTP)
- Email and SMS alarm notifications
- Local dashboards
- · Custom scripting for advanced functions
- · Secure OPC UA Client and Server

Benefits:

- Remote commissioning and support of net worked devices and systems
- Data can be quickly collected from a wide range of systems simultaneously
- Data reports can be automatically compiled and sent saving time and money through greater efficiency
- Local dashboards can be used to create a remote accessible HMI
- Connect to different cloud solutions or create your own







Key Considerations:

- Do you want to collect valuable machine data for remote monitoring, alarming and predictive maintenance?
- Are you looking to implement an IIoT strategy at minimal investment?
- Do you want to offer new support services?
- Do you need to move machine data to an enterprise system from different PLCs or legacy devices?
- Could you use field data to optimize your machines' operational efficiency?

Most popular part numbers:

Flexy20500: Flexy 205 4-LAN (WAN) FLB3271: Flexy Card Wifi WAN FLB3204: Flexy Card 4G EU FLB3601: Flexy Card USB FLA3301: Flexy Card Serial



Product Training & Workshops:

Achieve faster development times on your projects. Go further than the start up quides!







Your Quick Guide to:

Secure Cloud for Industrial Remote Solutions

Talk2M

Secure Industrial Cloud

Features:

- Single cloud solution for both Flexy and Cosy
- Unlimited users and systems with free version included with all gateways
- Pro version subscription adds enhanced access control and security layers
- Access from anywhere with eCatcher, M2Web and eCatcher mobile tools
- High-availability service with scalable infrastructure
- Fully redundant server architecture
- Monitored 24/7/365
- · Regular security audits

Benefits:

- System grows with you but without need for infrastructure investment
- Reliability of Talk2M enhances your offer to your end customers for reliable service
- Layered security approach creates "Defense-In-Depth" reassurance
- Connection audit trail for all users
- Free version gives great flexibility at no cost



Key Considerations:

- Do you need multiple users with concurrent access (Pro version required)?
- Do you have internal IT and security expertise? You don't need it!
- Do you need a quick overview of KPIs?
- Do you need a reliable alarming and reporting system?
- Do you have mobile engineers who need access when travelling?





Most popular part numbers:

TM50041: Talk2M Pro
TM50042: Talk2M Top Up



View our Case Study:

Remote maintenance of gas turbine thanks to Ewon router and Talk2M







Your Quick Guide to Remote Management

Netbiter Cloud Gateway

Features:

- Includes Modbus and Ethernet/IP master functions as well as support for J1939 and SNMP protocols
- WAN or cellular connection choices
- 2G, 3G and 4G on-board support (5G with external modem)
- On-board I/O inc. 1 x relay output, 2 x digital inputs and 4 x analogue inputs
- 9 32 V DC support
- Cranking circuit to prevent unit going offline during generator start up or brief power loss
- Remote programming and configuration for industrial PLCs and machines
- Remote debugging, file transfer / software updates

Benefits:

- All configuration and gateway management can be performed remotely
- Data collected from devices in remote locations, even internationally, and pushed to provided cloud storage
- · Email and SMS alarm notifications configured easily
- Live connection to field devices can offer real-time data or controls
- No need for a control system to gather data the Netbiter gateway acts as a master data concentrator

Ewon Netbiter Gateway



Key Considerations:

- Do you need to collect valuable machine data for remote monitoring?
- Do you need to easily control field devices?
- Do you want notifications of state changes or even loss of connection?
- Could you offer extended services to your customers with a simple to set-up IIoT solution?
- Do you have the expertise to create a cloud solution in house? You don't need it!

Most popular part numbers:

NB1005: Netbiter EC350 - Ethernet + 3G NB1007: EC310 – Ethernet connectivity NB1022: EC360 - Ethernet + 4G (EU) NB1023: EC360 - Ethernet + 4G (NA)



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Your Quick Guide to: Remote Management Solutions

Argos Cloud Service

Features:

- Complete IIoT solution in the cloud included in price of gateway (View & Control account)
- Secure cloud storage of data logged from Netbiter gateways in remote locations
- Manage thousands of Netbiters from a single account (Manage & Analyse subscription account)
- Display live data on graphical dashboards or create reports and trend graphs of historical data
- Design your own layout with easy to use built-in tools and editors
- Export your data into report tools like Microsoft Excel

Benefits:

- Alarm notifications via email or SMS are easy to configure and manage across a number of users
- Logged data can be included in automatically generated reports
- Easy to create cloud-based, HMI-like dashboards with access from any browser
- Data security ensured through encrypted connections and two factor authentication

Most popular part numbers (annual fees):

NB4000: Netbiter Argos Manage & Analyse

NB4500: Manage & Analyse with extended log buffer 250K NB4502: Manage & Analyse with extended log buffer 1000K

NB4001: Extended log buffer 250K for View & Control NB4002: Extended log buffer 1000K for View & Control



Key Considerations:

- Do you need easy access to data from multiple sites concurrently?
- Do you need a cloud solution without the complexity or cost?
- Would historical data enable better. scheduled visits or improve machine operation?
- Is a simple alarming and monitoring system going to offer a new maintenance revenue
- Can you quickly and securely connect to remote machines for troubleshooting or to support local operations?



View our Case Study:

Realizing the Internet of Things netbiter.com/customers/case-studies





