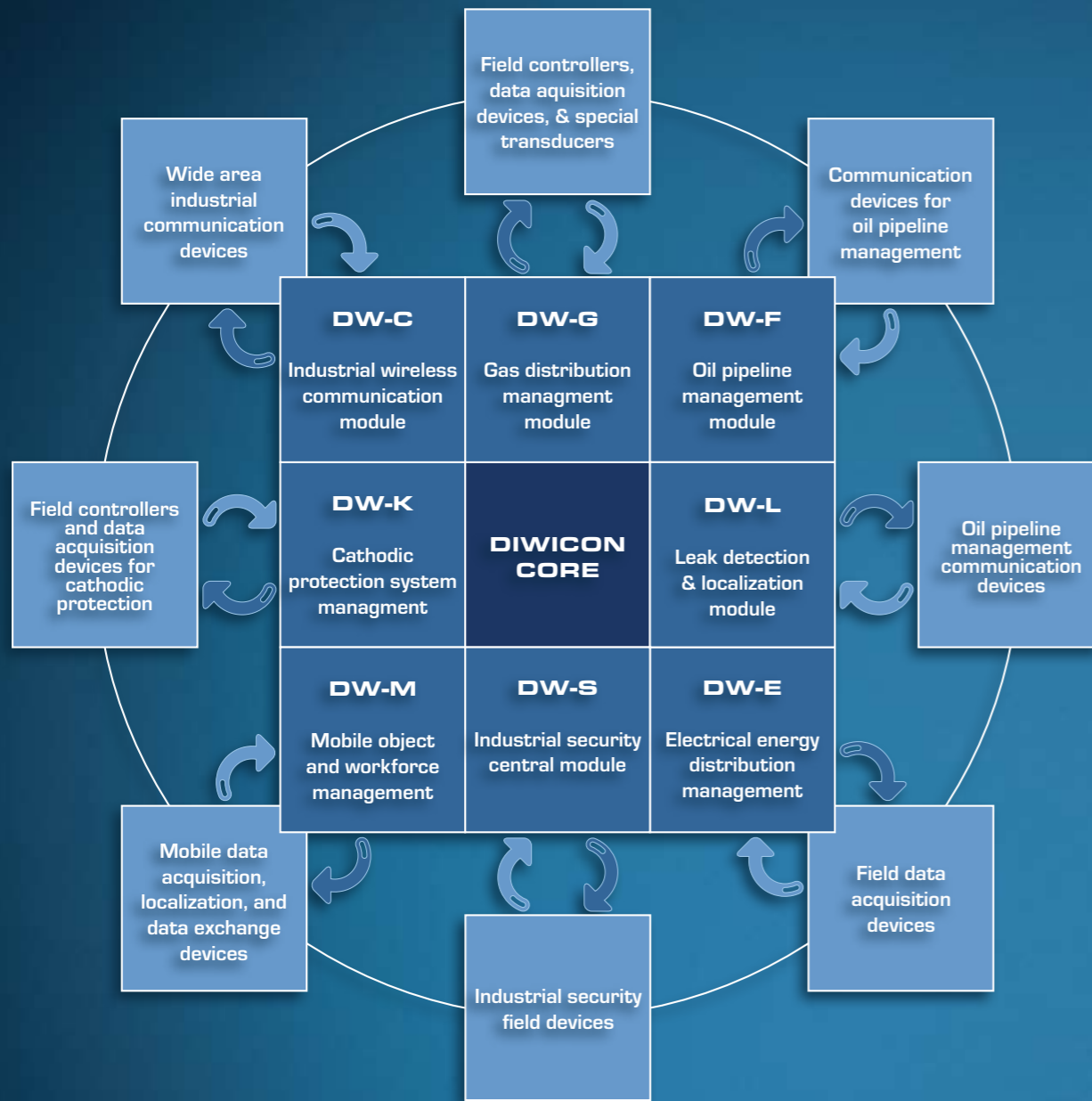


# DIWICON-C

DIWICON-C is a member of the DIWICON technology family which offers a range vertical products and solutions for industries requiring mission critical reliability.



**DIWICON-C**  
Wide Area Industrial Communication



**CASON Engineering Plc.**  
Velencei út 37.  
2030 Érd, Hungary  
T: +36 23 522 100  
F: +36 23 522 190  
e-mail: office@cason.hu  
URL: www.casonplc.com

**CASON Romania S.R.L.**  
Str. Dr. Romniceanu Grigore nr. 3  
Sector 5, București  
050574, România  
T: +40 21 411 31 61  
F: +40 21 411 31 62  
e-mail: office@cason.ro

**Singapore Office**  
CASON Singapore  
190 Middle Road  
#09-04 Fortune Center  
Singapore 188979  
T: +65 62264995  
F: +65 62236608

**Paris Office**  
32, boul. Vaugirard,  
75015 Paris, France  
T: +33 9 50 79 44 60  
e-mail: international@cason.hu  
URL: www.casonplc.com

# DIWICON-C

## DW 918 B iGPRS

### Field Bridge

- Ethernet / GPRS bridge for GPRS systems using parallel redundancy.
- It is capable handling the SIM card of a single GSM service provider.

### Paralell redundancy

PRT uses two GPRS links simultaneously if possible. In order to increase the quality of throughput it is necessary to use different GSM operator's services. Any time data transferring has being started all active GSM operators will be used to send messages.

## DW 982 L

### Field router and firewall

- Field router and firewall for GPRS systems using parallel redundancy.
- The device has three independent Ethernet ports, each with separate network settings.

## DW 982 LC

### Central router and firewall

- Central router and firewall for GPRS systems using parallel redundancy.
- The device hasn't any SIM socket but has three independent Ethernet ports, each with separate network settings.

## Other Devices

### DW 918 N

#### GPRS Field Router

- Ethernet / GPRS router, firewall and bridge for GPRS systems using alternating redundancy.
- It has an Ethernet port witch must be connected to the LAN

### DW 918 LC

#### Central router and firewall

- Central router and firewall for GPRS systems using alternating redundancy.
- It hasn't any SIM socket but three dedicated Ethernet connector: one for the LAN and two for GSM operator's leased lines.

### Alternate redundancy

ART used two GPRS links to communicate however, data transmission is enabled on one of them only at the same time. The communication device changing operator when the preferred one is not ready to provide GPRS link.



### DW 712 UTC

#### GPS based exact time server with TCP/IP interface

- The core function of the DW 712 UTC is the exact synchronization to the Universal Time [UT - Universal Time] provided by the GPS system.

### DW 297 C

#### GPS data acqasition and communication unit

- The device has two independent communication channels with independent settings.

### DW 998 LC

#### Central system monitoring unit for systems using alternating and parallel redundancy

### DW 9900 CA

#### Central communication system supervision database and intranet application

## Cyclic/Event-oriented Conversion

DW 991 L and LC devices provide additional functionality that enables using of event-oriented communication. At the field side the DW 991 L unit polls devices connected to LAN via Modbus/TCP protocol. It has a configurable cache for the required Modbus registers. Any changes in the cache exceeded the predefined threshold generate data message sending to the central DW 991 LC.

DW 991 LC at the central side receives changes of field values transmitted by DW 991 L. It is a cache mechanism which guarantees up-to-date information.

## OVERVIEW

DIWICON-C is part of the DIWICON technology. It provides high reliability wide area industrial wireless communication solution for mission critical automation and data acquisition systems.

The DIWICON-C technology works together with GPRS, building a transparent wide area network (WAN) over separated local area networks (LAN) and can be reached by other applications and devices.

The objective in using GPRS is to offer a reliable and cost-effective data communication solution. The availability of data transfer can be further increased if, instead of a single GPRS connection, dual connection parallel or alternate redundancy is used.

One of the most highlighted services in the DIWICON system is the optimized data communication. This basically means an event-oriented communication, so only the information needed by the system generates real data traffic.

The other benefit of the solution is that the data refreshed time is independent of the quantity of data and the bandwidth of the data-communication channel.



## Benefits of DIWICON-C

- Unlimited area - Wide area
- High availability
- Easy and fast startup
- Standard protocols
- High data security
- Low investment costs
- Low operation costs
- Low maintenance



## Redundancy

The goal of redundancy is to achieve the high levels of reliability required in industrial applications.

DIWICON-C systems use the GPRS networks of two independent GSM operators.

Depending on reliability needs, parallel or alternative redundancy can be used.



## IP protocol

IP based communication offers the greatest possible compatibility.

The support of standard IP based protocols like UDP, TCP, ICMP, FTP and HTTP assures general applicability independent of the use, type, or manufacturer of the central and field devices.



## IPSEC

Internet Protocol Security is a de facto standard for data security on IP networks.

It offers data encryption, data integrity and protection against malicious recorded and repeated data transmissions.



## NAT

Network Address Translation is a standard feature of all DIWICON-C communication devices.

Besides the firewall function, it simplifies integration of DIWICON-C wide area communication systems with central and field networks.