

# JM|CONCEPT



■ Analog - Digital Converters

■ AC Inputs Converters

■ Power Measurement Units

■ Indicators

■ Loop Isolators

■ Communication Interfaces



Hot-Swappable  
Plug In and Out



Universal  
Power Supply



Sensor  
Power Supply



Modbus



Analog  
Technology

## TELIS 9000 Universal Input

Current or Voltage inputs, RTD, Thermocouple, Potentiometer,  
2 wires Resistance, Special Tables for NTC PTC  
Quadruple galvanic isolation 3750 Vac 1mn 50Hz  
24-bit conversion for inputs and 16-bit for outputs  
Cold-junction compensation accurate to  $\pm 1^{\circ}\text{C}$



Available in 1 or 2 analog outputs and up to 4 relays

## ULCOS 900 Universal Input

Current or Voltage inputs, RTD, Thermocouple, Potentiometer,  
2 wires Resistance, Special Tables for NTC PTC  
Triple galvanic isolation 2500 Vac 1mn 50Hz  
DIN rail mounted and Swapable connectors  
16-bit conversion for inputs and 16-bit for outputs  
Cold-junction compensation accurate to  $\pm 1^{\circ}\text{C}$   
Low footprint of 17.5mm with graphic screen display



Available in 1 or 2 analog outputs and up to 2 relays

## TELIS 1000 Strain Gauge Input

Conversion dedicated to measurements with strain  
gauges (4-6 wires)  
Quadruple galvanic isolation 3750 Vac 1mn 50Hz  
digital input for calibration  
24-bit conversion for inputs and 16-bit for outputs



Available in 1 or 2 analog outputs  
and up to 2 relays

## JK 7000 Potentiometer Input

Potentiometer input  
Triple galvanic isolation 2500 Vac 1mn 50Hz  
Response time less than 0.1 ms  
Very low thermal drift of less than 50ppm



Available in 1 Process Current or Voltage  
output or 2 completely independent non  
isolated outputs.  
Available with passive output

## JK 3000 Process Input

Process input  
(0-100mV; 0-10V; 10V; 0-20mA; 4-20mA)  
Triple galvanic isolation 2500 Vac 1mn 50Hz  
Response time less than 5 ms



Available in 1 Process Current or Voltage  
output or 2 completely independent non  
isolated outputs.  
Available with passive output  
Available with lightning shock protection

## EOLIS 3000 Double Process Entry

Two inputs, independent and isolated,  
Process (0-100mV; 0-10V; 10V; 0-20mA; 4-20mA), RTD or PT100 2 wires  
Quadruple galvanic isolation 3750 Vac 1mn 50Hz  
24-bit conversion for inputs and 16-bit for outputs



Available in 2 analog outputs and up to 4 relays

## GK 3000D1 - TELIS 9000U2-RED Redundance

Two Process (4-20mA) inputs, independent and isolated,  
dedicated to redundancy.  
With its 2 analog inputs and 2 digital inputs on Optocoupler,  
it particularly serves two application cases:

- Interfacing two PLC to an actuator (GK)
- Interfacing a sensor to two PLC (TELIS-RED)

Double galvanic isolation 2500 Vac 1mn 50Hz



## AC INPUTS CONVERTERS

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### TELIS 8000 Frequency Input

Frequency input and a Process output  
Quadruple galvanic isolation 3750 Vac 1mn 50Hz



Available in 1 output and up to 2 relays

### ULCOS 800 Frequency Input

Frequency input and a Process output  
Triple galvanic isolation 2500 Vac 1mn 50Hz  
DIN rail mounted and Swapable connectors  
Low 17.5mm footprint with graphics screen display



Available in 2 analog outputs and 2 relays

### JK 6010 A1 Alternating Current Input

Adjustable alternating current input on either two calibers:  
▪ 0-5A from 45Hz to 65 Hz  
▪ 0-1A from 45Hz to 65Hz  
Quadruple galvanic isolation 2500 Vac 1mn 50Hz



### TELIS 6000 AC Input

Alternating Current or Voltage input and Network Frequency Measurement  
Quadruple galvanic isolation  
3750 Vac 1mn 50Hz



Available in 1 analog output

### ULCOS 600 AC Input

Alternating Current or Voltage input and Network Frequency Measurement  
Triple galvanic isolation 2500 Vac 1mn 50Hz  
DIN rail mounted and Swapable connectors  
Low 17.5mm footprint with graphics screen display



Available in 1 or 2 analog outputs and up to 2 relays

## POWER MEASUREMENT UNITS

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### WK 6000 AC Measurement

WK 6000 are designed to measure and convert all electrical parameters of primary and compound values, on all types of electrical networks, monophasic, balanced or unbalanced triphasic, 3 or 4 wires and for all current (5A) or voltage (700V) values.  
WK6000 are sold with their BL02WLV base with auto-short circuiting contacts for current inputs  
The running inputs are galvanically isolated from each other by internal CT.  
Each exit is isolated and completely independent

The WK 6000 comes in three models:

WK 6000TU with 3 Isolated Analog Outputs, 2 Isolated Pulse Exits and 2 Relays  
WK 6000IS with a TCP/IP-MODBUS output via an RJ 45  
WK 6000TS with a TCP/IP-MODBUS output



### EOLIS 6000 DC Measurement

Two inputs, independent and insulated, especially suitable for photovoltaic installations.

This converter connects Strings of 1 or more solar panels and controls the current, voltage and power delivered by these sets.  
Quadruple galvanic isolation 3750 Vac 1mn 50Hz



Available in 2 analog outputs and 4 relays

## INDICATORS

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XALIS is a digital indicator with a two-tone display that allows for analog and digital transmission of various signals. Built-in case IP65 48 mm x 96 mm x 85 mm equipped with Swapable connectors and a USB socket in the rear.

Quadruple galvanic isolation 3750 Vac 1mn 50Hz

XALIS comes in two models:

- XALIS 9000 with universal input: Current (continuous), Voltage (continuous), RTD, Thermocouple, Potentiometer, 2 wires Resistance, Special table for NTC PTC
- XALIS 1000 has a dedicated measurement input for 4-6 wires strain gauges with a calibration function

Available in 1 or 2 analog outputs and up to 4 relays



## LOOP ISOLATORS

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### EOLIS 0030A2 Double Process Isolator

### JK 0030A1 Process Isolator

Isolator with 2 current inputs 0-20mA or 4-20mA independent and insulated and 2 current outputs 0-20mA or 4-20mA

Isolator with a Process input 0-20mA or 4-20mA and a current output 0-20mA or 4-20mA

Quadruple galvanic isolation 3750 Vac 1mn 50Hz

Triple galvanic isolation 2500 Vac 1mn 50Hz



Available with lightning shock protection

Available with lightning shock protection

### JK 0030A1-H Transparent HART

### JK 2000 Loop isolators

Isolator with a Process 0-20mA or 4-20mA input and a current output 0-20mA or 4-20mA, designed to isolate power loops and allow communication with sensors or actuators using the protocol HART.

Self-powered loop Isolators, with a Process 0-20mA or 4-20mA input and a 0-20mA or 4-20mA current output to simply solve noise signal disturbance on analog measurement loops. The JK2000 presents itself in a low footprint case to be connected on a symmetrical or asymmetrical DIN rail

Triple galvanic isolation 2500 Vac 1mn 50Hz

Response time less than 0.5 ms

Two-way communication with the HART protocol

The JK2000 comes mainly in three versions:

- JK 2001 single channel
- JK 2002 2 electrically and mechanically independent channels
- JK2001D in a Hot swappable Plug-in Unit



Available with lightning shock protection

JM Concept has developed a system of communication interfaces to decentralize analog inputs and outputs and transmit all data by a fieldbus.

## Simplicity, modularity and scalability :

The baselines allow all type of modules to be connected: inputs can be process (Current, Voltage) or electrical parameters as well as temperature (PT100, Thermocouple with CSF, or any other sensor), see digital inputs ...

The baselines allow our modules to be hot swapped (in Plug in and out mode, i.e. the module can be removed without interrupting the power supply of other devices), ensuring maximum service continuity and easy upgrades

All measurements can be captured and sent via a communication Hub. These Hubs fit each type of field bus. If the PLC evolves or the field bus is different, we just need to change the Hub. Thus, the whole acquisition with its isolation, remains the same.

## UHLIS: Acquisition and Communication

Acquisition of 4 simultaneous inputs in a 22.5 mm case, reducing footprint to less than 6mm per input.

Its Modbus TCP connection via an RJ45 allow data to be easily transmitted to local installations and/or the cloud.

It serves also as an entry point to the RS485 Field bus to query any other device on that bus.

Quadruple galvanic isolation 3750 Vac 1 mn 50Hz



UHLIS 3000 comes in several versions:

- Entry calibers +/-100mv or 4-20mA
- With or without a TCP/IP connection

## Communication Hubs

JM Concept has developed a range of communication Hubs allowing data transfer based on the field bus Protocol. These Hubs are capable to interface up to 24 slaves (i.e. 1 to 96 measuring inputs).

All our baselines (BL) have an internal communication bus, which manages the communication between the concentrator and his slaves, and allows us not to slow down the field bus

These Concentrators come in the following versions:

- MIPLINE Communication Hub for MODBUS TCP
- MPNLINE Communication Hub for PROFINET
- EIPLINE Communication Hub for ETHERNET IP
- MPBLINE Communication Hub for PROFIBUS
- MRSLINE Communication Hub for MODBUS RTU



## Decentralized Inputs-Outputs

Our interfacing solutions are compatible with different field buses (Modbus TCP/IP, Profinet, Profibus, Ethernet IP, Modbus RTU).

Our Baselines BLs are equipped with a power bus that allows to have a common power supply for all the modules, and an internal communication bus

Several types of modules can be interfaced with any type of input:

- Process (Voltage, Current)
- Temperature (PT100, TC ...)
- Strain gauge,
- Digital input,
- Frequency,
- Electrical sizes (Voltage and Current)
- Power and Energy



Several types of modules can be interfaced with any type of output :

- Analogs
- Relay
- Sensor feeds
- Galvanic isolators

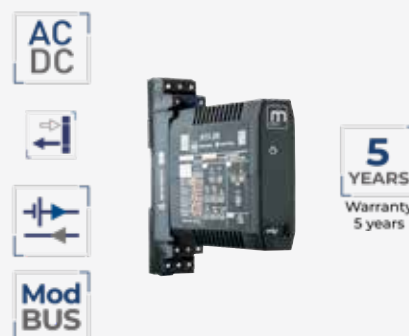
There are different Baseline models that connect 4 to 32 Inputs.

## EOLIS 0040T0

4 isolated digital inputs NPN, PNP or Dry Contact  
Quadruple galvanic insulation 3750 Vac 1 mn 50Hz

Information on the status of entries transmitted directly through digital link.

USB connection allows the programming of both the address and the speed of transmission.



## JK 1000 Sensor Power Supply

JK1000 Sensor power supplies have 4 isolated supply lanes in groups of 2.

They can isolate each loop and protect the sensor in the event of a short circuit, thanks to its current limitation.



## IXLOG Programming Softwares

IXLOG allows for a user-friendly setting of each module of our product line.

It makes it easier to perform a simulation or vary the points of the linearization curve, among others.



\* Requires the ULCOS 100

## ONLINE SHOP

Our online shop is open 7 days a week - 24h / 24h  
Accessible from our website: [www.jmconcept.com](http://www.jmconcept.com)



Place your orders safely  
with our banking partner



On-line payment by credit card or  
bank transfer

## HOTLINE AND SUPPORT

Our teams of engineers and salespeople, instrumentalists and automation experts, will be listening, to advise you and propose you solutions from choosing the right device to implementing your specific processes.

Several other models exist to suit your specific needs. Please do not hesitate to contact us by phone or email.

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