



### 5G RedCap “future proof” connectivity

The FE910C04 is a new member of Telit Cinterion's flagship xE910 module family. It delivers 5G NR radio access technology in the 28.2 x 28.2 x 2.2 mm family form factor.

The xE910 unified form factor family comprises products that include 4G (LTE LTE-M, nB1oT), 5G Redcap, GNSS, embedded embedded SIM (eSIM).

The FE910C04 in the picture is industrial grade 5G RedCap, rugged, suitable for global use, with enhanced uplink performance, power saving features, and with LTE Cat 4 fallback for best coverage.

#### Applications:

- Video surveillance and monitoring
- Industrial Routers and Gateways
- EV Charging infrastructure
- Machine Telematics

#### Features:

- Global and regional profiles for full design flexibility and longevity with 5G technology
- Embedded processing and complete support for connectivity activation and OneEdge™
- Security by design with device-to-cloud connection
- Improved operational efficiency and precise GNSS positioning with support for L1 and L5 frequencies and a dedicated antenna port



### EGX81-W LTE M, NB-IoT and 2G Terminal Gateway

The EGX81 gateway supports all LTE bands plus Quad Band GSM and it delivers a suite of MTC technologies including LTE Cat. M1, Cat. NB1 and Cat. NB2. RS232 or RS485 version followed by the new USB version EGX82-W.

An optional integrated eSIM strengthens security, simplifies manufacturing and streamlines logistics while providing flexibility in the field with easy remote provisioning and dynamic subscription updates.

A programmable hardware watchdog ensures reliable operation and the unique incremental Firmware Over-the-Air (FOTA) implementation dramatically reduces the size of update binaries, thereby stretching battery life.

#### Interfaces:

- Mini-SIM card reader, 1.8V and 3.0V
- Plug-in power supply connector (6-pole Western jack @ EGX81 RS232 variant)
- V.24 / V.28 RS232 interface (D-sub 9-pole female socket) @ EGX81 RS232 variant)
- 6 pin header with RS485 interface, power and ignition/reset @ EGX81 RS485 variant
- Operating status and Watchdog operation indication LED's



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## Design with GaN for High-Performance Motor Drives for High-Voltage Battery Applications



### Motordrive reference design

The EPC91200 provides a versatile reference design, with optimized PCB layout, for wide input voltage range motor drive applications.

The EPC91200 is designed for 3-phase brushless DC (BLDC) motor drive applications and features the EPC2305, a 150 V 3.0 mΩ RDS(on) GaN FET. The EPC91200 supports wide voltage ranges from 30 V to 130 V, making it suitable for 80 V and 110 V battery systems commonly used in industrial automation, agricultural machinery and material handling equipment like forklifts.

#### Features:

- High Current up to 60 A<sub>pk</sub> (40 A<sub>RMS</sub>)
- Enhanced Efficiency due to PCB Layout
- Temp, Voltage and current monitor included
- Industrial motorcontroller board compatible



40 YEARS OF INNOVATION AND CONTINUITY



### Optical reflective encoder

Technological step forward for optical encoder from iC-Haus: New iC-PXL3212 with extended range of functions and features.

The new iC-PXL3212 from iC-Haus is an optical, reflective, lensless encoder IC with integrated HD phased-array photo sensors and a blue LED chip.

- Compact, high-resolution, incremental
- For reflective discs of > Ø10mm
- Linear scales
- Digital A/B (×16,×64 interpolated) or analog sin/cos
- OTP FlexCount® configuration at wafer
- Temperature range of -40°C to +125°C
- Compact and lensless optoQFN mold package (4mm×4mm×0.9mm)
- Evaluation kits available



### High voltage capacitor up to 630 VDC

Kendeil is proud to announce the high voltage range extension of our K04 and K06 series.

Usually in high power electronics applications, such as high voltage DC/DC converters, inverters and motor drives, there's the need of a DC link between the DC and AC part of the system. It is often implemented through an electrolytic capacitor bank with several capacitors, connected in series and parallel configuration, thus achieving high capacitance value at high DC rated voltages.

To reduce the complexity of balancing issues with the use of these banks the K04 & K06 offers a higher working voltage, so series and parallel connection is not needed.

Up to 630 Vdc and 47000 µF also in long life available. Full optimized custom models available.



### Low cost compact IMU

Tamagawa has added a low cost small compact waterproof IMU to their portfolio of electromechanical components.

The TAG310, a MEMS inertial measurement units, is targeted at AGV, forklifts, agricultural vehicles, construction vehicles and many more.

#### Features:

- Compact size 83 x 50 mm
- Easy mountable
- IP67 water proof
- Power supply 8-28V
- Power consumption 1W
- CAN bus interface
- 3-axis angular velocity
- 3-axis acceleration
- Roll, Pitch and yaw angle





## CLO low profile 4G/5G antenna

The CLO is a 4G/5G multiband low profile puck antenna operating in the 700-3800 MHz frequency bands.

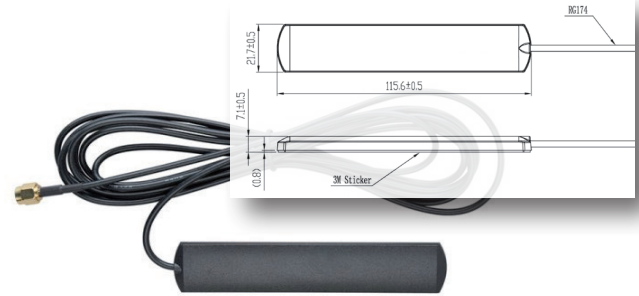
IP67 rated when mounted for continuous outdoor operation, this antenna is a robust and effective performer with exceptional gain figures.

### Features:

- 1 x 4G/5G Element
- Compact Dimensions
- Permanent Mount
- Mount onto Metal Surface

### Applications:

4G/5G Access, Vehicles / Transportation, Cabinets, Security/ CCTV Systems Kiosks and Terminals



## LTE blade antenna

The blade 157 is IP66 proof wide spectrum LTE antenna with standard SMA connector and 2 meter cable.

Different cable length and/or connector is produced in only a few weeks.

### Features:

- Frequency range 698~960/1710~2690MHz
- Gain 2.0dBi Zenith)
- V.S.W.R 3.0
- Standard RF-cable RG174
- Adhesive mounting method
- Operating Temperature -40°C / +85°C
- Custom version starting already from +100pcs and samples are fast available for testing
- ROHS compliant
- Stock item at AVE



## Tubular ceramic resistors

Ohmite's non-inductive, high voltage, high power tubular resistors are available in a wide range of standard sizes, ceramic materials terminations and mounting hardware.

The Ohmite Ceramic Resistor Division Tubular NonInductive Bulk Ceramic Resistors provide excellent performance for high peak power or high-energy pulses. These resistors can handle up to 1000 watts, 165 kJ and 165 kV in resistance values from 1 ohm to 1 megohm.

### Applications:

- High-voltage circuits
- X-ray equipment
- High voltage power supplies
- Laser/Imaging equipment
- RF dummy loads



## New full customized LED

AVE introduces a full line of customizable LED displays that is intended for many whitegoods and automotive markets. These displays offers high visibility in all environments.

These LED display are targeted for volume business in the following applications:

- Washing machines
- Microwave
- Coffee Machines
- Furnaces
- Refrigerators
- Induction hobs
- Automotive applications

Also standard LED displays available for high volumes. Please contact AVE for the possibilities





### TXN -series - Metal enclosed AC/DC power supplies for cost sensitive applications

The new TXN line comprises a series of cost efficient metal enclosed AC/DC power supplies 35 to 800 Watt.

#### Features:

- Industrial AC/DC with input 90-264Vac
- Compact metal case with screw terminal block
- Ideal for cost sensitive applications
- Operating temperature range  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- I/O reinforced isolation 3000 VAC
- Internal EN 55032 class B filter
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- EN62368-1(LVD) approved

**TRACO POWER**



### TEC 3UI Series - 3W Ultra-wide 8:1 input range DC/DC

New generation of compact 3 Watt DC/DC converters with an ultra-wide 8:1 input range with a SIP-8 Package.

#### Features:

- Ultra-wide input range: 9 VDC to 75 VDC
- Compact SIP-8 plastic case
- Certification according to IEC/EN/ES 62368-1
- Operating temperature range  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- I/O isolation 1600 VDC
- Operating up to 5000m altitude
- Short circuit protection and over current limitation
- Under voltage lockout
- Remote ON/OFF

**TRACO POWER**



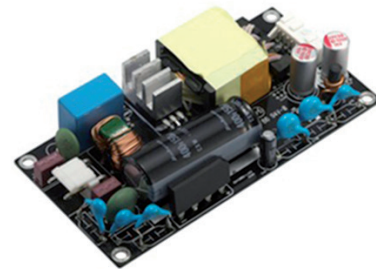
### VSC Series – New Space - Isolated Dc/Dc Converter Modules

Low cost alternative for New Space applications, available in a 5W, 15W, 30W and 100W-version with an input of 15-50V single or dual output.

#### Features:

- Radiation Guarantee :
  - › TID 30krad(Si) incl. ELDRS
  - › SEE > 30 MeV-cm<sup>2</sup>/mg
- Radiation Hardness Assurance :
  - › RLAT of sens. semiconductors to 40krad(Si)
  - › Converters characterized to 30krad(Si)
  - › ELDRS characterized to 30krad(Si)
  - › SEE characterized to :
    - ★ 42 MeV-cm<sup>2</sup>/mg for catastrophic events
    - ★ 30 MeV-cm<sup>2</sup>/mg for transients
- ISO9001, J-STD-001 and IPC-A-610

**VPT**



### MPE-F100 100W Ultra Slim Design Power Supply

Magic Power introduced the MPE-F100 a 100W with 20mm height and fits perfect for LCD panel and all-in-one PCs.

#### Features:

- Ultra-slim Family PSU.
- 2x4" with only 22mm of height !
- 100W with convection cooling
- 150W Peak Power for 3.8sec (230Vac)
- Height Efficiency up to 90%
- No-load power consumption < 0.1W
- Outputs : 12V/24V/48Vdc
- EN62368-1(LVD) approved
- Designed to meet IEC60335-1, IEC60601-1(Med.)
- Meets EMI CISPR/FCC Class B
- Also exists in 60W version – Height < 20mm

**MAGIC POWER**  
Innovative Power Supply Solutions

