

WE ENLARGE OUR STOCK BY **100%**

**4D SYSTEMS - 2,3,4 ... 7
INCHES WILL DISPLAY
MORE**

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**QUECTEL UC20 INTE-
GRATES GSM AND GPS
INTO A SINGLE MODULE**

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**WINSTAR - DISPLAYS FOR
THOSE, WHO WANT TO
HAVE EVERYTHING UNDER
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1553T



1599 Tablet



1555 flanged IP67



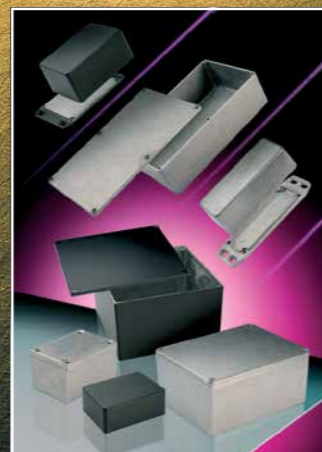
1590 TRP-STP



1553



1550Z / 1590Z IP66



1550 / 1590



1554 / 1555 IP66



1591 / 1591XX



Ritec



1455



1551

Standard and modified aluminium, metal and plastic enclosures

www.hammondmfg.com

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SOS NEWS

Dear readers

10 years ago when I was working at purchasing department, I considered two parameters to be the most important, i.e. price and availability. Even nowadays, everybody wants

to get the best price and goods in the shortest time. But after all, there is one difference. What seems to be the best price doesn't have to be „the best“ in the end. Today we have many opportunities as to where to buy electronic components and modules, in Asia, Europe or in America or from any type of supplier that can be directly producer, franchised distributor, independent distributor or broker. For the last few years we can see a noticeable shift from conventional electronic components to the more sophisticated products, such as embedded systems or various communication modules that requires certain technical support. Everybody will agree that one of the parameters of success is the shortest time for development of applications and products since as we all know, time is money. If your supplier can help you shorten this time for development by selecting suitable solutions and at the same time provides you with prompt technical support, then you will save considerable amount of money and will get advantage against competitors. In case of mass production, you expect your supplier to react to your immediate purchasing requirements or planned supplies „just in time“. You surely will appreciate the partner that helps you with promotion of your products on various markets for free and by this will increase your chance to succeed.

We in SOS electronic are trying to be reliable partner that helps you, our customers from the beginning till the end. We focus on customer solutions with excellent technical support including support directly from producers that we represent on our markets. We constantly bring innovative methods to make your job easier by publications of various technical articles, organization of regular webinars or workshops. This year we will invest the highest amount in the history of our company to enhance our stock inventory - 1 000 000 EUR. And as one of few distributors we can help you with promotion of your products. Regarding this, we have solution for you for free via e-cube portal that will promote your products on various markets.

Many customers appreciate benefits of our cooperation because they are aware of the fact that behind the final price of their products there is not only purchase price of individual components but also services we provide, which in the end lower their price. We are ready to be your reliable business partner. We believe that we can achieve a lot together.

I wish you to get many inspiring ideas while reading this issue.

SOS News.
Ján Michalko
International sales manager

Read your SOS news with mobile!

You can read this issue of SOS news using so-called QR codes. At the end of every article you can find a picture with encrypted address of the Internet website to this article.



We strengthen our team...

Renáta Tančáková – International Finance Manager



I finished my studies at University of Presov, study programme Business economics and management. I was working for U.S. Steel Kosice for a long time on various job positions - economic field, credit risk and debt recovery and purchasing department as a purchaser for divisions in corporation. After I left U.S. STEEL Kosice, I became a chief economist in public administration and later a financial director for Auto Gábiel, s.r.o. Košice. I have an extensive experience with financial management and controlling, accounting and tax legislation in business and public sphere, insurance and management of claims. In my free time I do sport, I like reading non-fiction and travelling.

Barbora Demčáková – purchaser



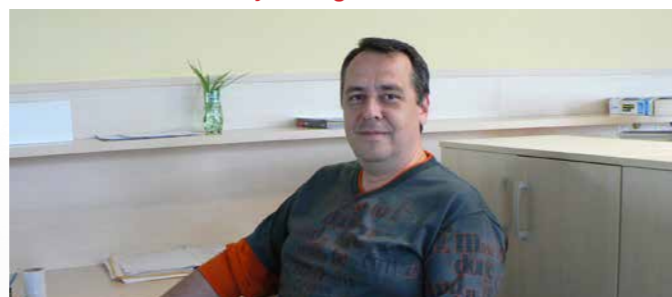
After finishing British and American studies at UPJS in Kosice, Faculty of Arts, I started to work for SOS electronic as an English language teacher. I later tried to work on purchasing department as a trainee and from December 2013 I became a member of purchasing team as a purchasing officer. Hence SOS electronic is my first job and I am responsible for communication with suppliers, ordering of equipment for our customers as well as preparing price lists for vendors. I devote my free time to my dog that I adopted from animal shelter, and horse riding. My hobbies are also fashion and interior design.

Peter Jakubkovič – Account Manager



I have been working for SOS electronic since 01.02.2014 as a sales assistant for German and Austrian market. My main responsibility is to process orders, prepare price lists and take care of our customers. Before I started to work for this company, I was working as a „specialist insurance events“ in German company that deals with sales, rent and service of branded commercial vehicles. I am looking forward to working with a team at SOS electronic on expanding business opportunities in the German and Austrian market.

Ján Serbinčík – Facility Manager



I am 40 years old and have 2 small children. I was born in Trebisov where I studied to become a mechanic of electronic devices. Apart from being an electro-mechanic I also have experience in business and sales. I work in SOS Electronic as a building administrator. This position allows me to use and build on all of my work experience. After work I like to relax with rock music or watch a good movie.

In 2014 we're giving away 52 prizes and tablet

Count weeks in SOS calendar with us... 52 weeks, 52 great prizes and finally, tablet Google Nexus 7. You can win great prizes every single week during the year 2014. You just need to answer one simple question.

Don't you know the answer?

Never mind. Correct answers can always be found in the articles concerning individual questions.

Where can you enter the competition?

Current questions and also list of winners can be found at www.soselectronic.com/2014 So go ahead - play and win. At the end of the year one of you will be the owner of tablet Google Nexus 7.

The more often you will correctly answer our questions during the year, the greater chance you have to win.

The article with more information can be found at our website. Decode the link by QR code.



Get samples for your projects for free!

You will design new industrial hardware applications and we will help you with component samples for test series.

We in SOS electronic understand that in order to design the most effective applications of high quality without real testing of components is almost impossible. That is why we offer you the possibility to get samples of our components for free.



How to get them?

Let us know about your project at marketing@soselectronic.com and we will choose the most interesting ones and help you with testing of our components! Note: Check the list of trademarks in our SOS Solutions.

The article with more information can be found at our website. Decode the link by QR code.



"EVA" exposed herself in front of developers...

The beginning of April was about FTDI, developers, pizza and one lady named „EVA“.



What's hidden in graphic chip FT800 together with EVE technology? 45 developers from Hungary, Slovakia and Czech Republic could find out directly from Greame Simpson and Gordon Lunn from FTDI. These men introduced EVE technology from its basic characteristics and benefits of new graphic chips to the possibilities of creating own applications. Workshop participants could try „hands on“ simulation of development and work with graphic chips FT800.

The interest in this Pizza workshop was again enormous. Many of you highly appreciated this practical workshop, we've got many positive feedbacks.

The article with more information can be found at our website. Decode the link by QR code.



Latest news about SOS electronic....



We have grown by 13% in the first quarter

During the first three months of 2014, SOS electronic europe group achieved a turnover of 3,35 mil. €, which represents an annual increase in revenues by 13%. We are also pleased that after significant investments into Polish market it started to prosper significantly and we have achieved quartal increase in revenues by 72%. For this achievement, we would like to say thank you to our customers.



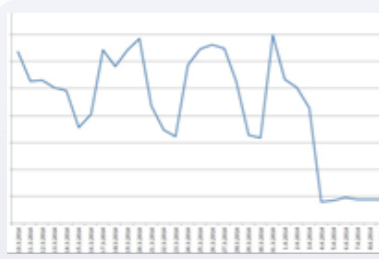
We have experienced such an amazing increase

This year, in addition to the unique services, we would like to enlarge our inventory. That's why we have kicked off the biggest increase of our stock. For these purposes, we allocated the sum of 1 mil. €. Altogether we should increase our inventory by almost 80%. Till now, the value of our stock is 2 mil. €. Visit our stock at least virtually via video at: www.soselectronic.com/stock.



100 companies already promote their products on

Have you heard of product promotion FOR FREE? This is one of our services for you! WE asked you: „What can we do for you, so you buy from us more?“ YOU answered: „Help us promote our products.“ And so we help you promote your products among more than 200 000 professionals from the field. More than 100 companies used this opportunity during the first few months. Aren't you among them? It's very simple. You need less than 10 minutes. More at www.ecubeportal.com.



Our web is 7-times faster

Do you use parametric search on our web? We've got great news! We invested into new webserver and since it was launched, searching and filtering is 7 times faster than before. The average length of processing the request with parametric filter for the most extensive product groups dropped to 0,2 sec. Try it on your own :-)



To Czech Republic in one day

Don't you still use our product delivery to Czech Republic within 24 hours? Thanks to our relations with forwarders we are able to deliver goods from the distribution centre in Košice to Czech Republic within one day for more than a year. If you order goods till 10:00, it will be delivered the following business day.



Latest articles to read...



RFID module ID12LA will also abide a lower voltage

New version of a favorite RFID module ID12LA will enable you to implement RFID into your device even more easily thanks to a wide range of supply voltage.



Make your soldering easier with a Flux SK10 spray

A flux in a spray from company Kontakt Chemie is a very useful helper for development and production.



EBM Papst - the highest quality for an acceptable price

If you're deciding, which fan to use in your application, we have for you a good hint.



2J620P antenna - GSM and GPS under one roof

New antenna 2J620P will provide you a high quality GSM and GPS signal at once, moreover with a very simple assembly.



With modules Quectel UC15 and M95EB you'll gain Dual SIM, eCall, HSD-PA and other functions

New GSM/GPRS/GPS/GNSS modules Quectel offer also special functions, able to make your product exquisite.



Narrow but strong - relay Fujitsu FTR-LY

With its width of only 5mm is this relay able to switch 6A/250VAC, moreover at a minimum coil power consumption.



Do you already have solved a connection to a PCB?

Connectors of the PV, SV and SH series are available in a huge amount of versions and sizes, that's why you'll certainly find here a suitable type for you.



Simplify your work at development and testing with WAGO banana plugs

Bare wires going from a tested device do not have to mean a problem or require a long time to connect to a power supply.



Black or white?

Do you have an application where a black switch is not suitable? We have an elegant white one for you.





2,3,4 ... 7 inches will display more

Company 4D Systems launches on the market a powerful graphic processor Diablo 16, suitable even for larger displays and powerful embedded applications.



Advantages / Features:

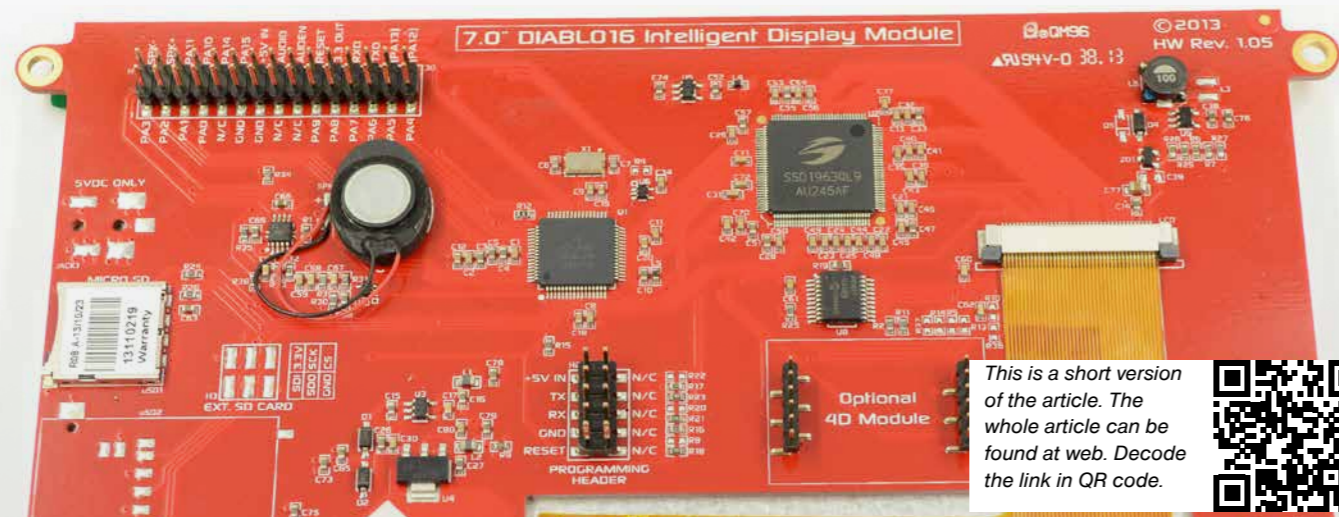
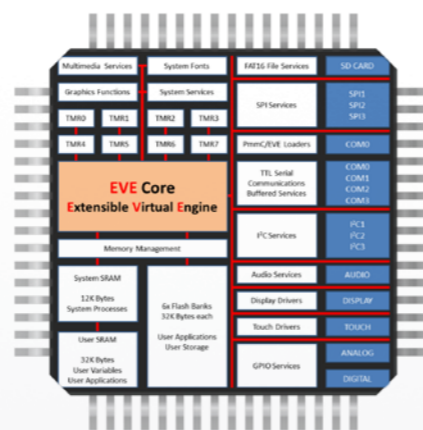
1. powerful 16 bit graphic processor
2. ideal as a standalone graphic processor or as a graphic coprocessor
3. 6 banks with 32750 Byte Flash
4. 32kB user RAM
5. 16 general purpose IO ports, including 4 analogue inputs
6. PWM, I2C, SPI,...
7. direct support of SDHC/SD cards, FAT16 files
8. free development software Workshop4 IDE

After a success of Goldelox and Picaso processors, company 4D Systems decided to design a processor which would be powerful enough for demanding graphic applications and also usable on larger displays. Processors Goldelox and mainly Picaso are still perspective everywhere, where they're sufficient by their power and memory, but for example they're not suitable for 7" displays. That's why the 16 bit processor Diablo16 comes on the market. What does it bring? It could be said, that increase of computing power and functionality in almost all ways. More possibilities, substantially more Flash and RAM,...


A good news is, that also the Diablo 16 has a

core designed for execution of programs in the 4DGL language, similarly like processors Picaso or Goldelox. The 4DGL language (4D graphic language) is a powerful, high-level language, which however maintains user friendliness and it's easy to learn. A big advantage is, that a powerful software package for development of graphic applications - Workshop4 IDE is usable also for the Diablo 16 and it's completely for free. Together with a new processors, there's also available a ready-made graphic module uLCD70DT (7", 800x480), ready for immediate usage.

- 01 Supports 80-Series 16 bit wide CPU interface OLED/LCD displays
- 02 6 banks of 32KB FLASH Memory, 32KB User RAM + 12KB System RAM
- 03 EVE uses ~1/10th of the code-space compared to most other processor implementations
- 04 Up to 4 Asynchronous hardware serial ports
- 05 Up to 4 SPI Channels with 1 dedicated to Memory Card
- 06 Up to 3 I2C Channels
- 07 micro-SD/SDHC card support
- 08 DOS compatible file access (FAT16)
- 09 Dedicated 16-bit PWM audio output to play WAV files
- 10 4-Wire Resistive Touch panel interface
- 11 16 General Purpose I/O including 4 12-bit Analog Inputs
- 12 PWM (Simple and Servo) along with Quadrature Input
- 13 Pin Counters, Pulse Out and Parallel BUS support
- 14 8 x 16 bit timers with 1ms resolution
- 15 450+ High Level Internal Functions



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
145849	ULCD-70DT	DIABLO16 7.0" 800x480 Intelligent Display Module	139,00€
155516	4DDIABLO16	Embedded Serial Graphics Controller TQFP64	17,00€
112515	PROGRAMMINGCABLE	USB to Serial-TTL Programmer for 4D Modules	18,00 €

Multi-pole industrial relays provide more possibilities



Switching of three-phase motors or a realization of a sophisticated installation is a breeze with industrial relays Finder.

As we know, a relay is a very versatile component, able to realize also various "sequential" circuits, when for example by switching one relay we'll switch on a target device and at the same time we'll enable (or disable) switching of another relay. In these case, it's an often demand for a relay to have a sufficient number of poles. Majority of such "logic" circuits can be realized even with a common 1-2 pole relays, but it's not always economical and it also brings another costs for solution of supplying and protection of logic circuits. Industrial relays Finder series „55" and „60" are suitable for a construction of such more complex circuits or for switching of three phase devices.

- Finder 55 - miniature industrial relay for a PCB or for socket, 2-4 poles, 7-10A (switching current up to 20A), 250/400VAC,
- Finder 60 - a more robust industrial relay for a socket, 2-3 poles, 10A (switching current up to 20A), 250/400VAC,



In the series 55 can be found types which can be soldered directly into a PCB (without a socket) or to insert into some of many available sockets (for PCB, with soldering pins or on a DIN rail). Types from series 60 need to be inserted into a socket (for PCB, with soldering pins or on a DIN rail). Naturally, for eventual repair/maintenance, it's much better to use a socket. Sockets can be equipped with metal or a plastic clip. Also exists a socket 94.94.3 with a safety separation of an input and output part. Similarly like at majority of Finder types, sockets can be equipped with optional protection and indication modules. Common feature of many relays from series „55" and „60" is, that they have an integrated test button control with dual functionality:

- pressing a button will switch on contacts thus we're able to test functionality of a relay
- by rotating the test button it's possible to switch on relay permanently

Returning the test button into its initial position, the relay will remain its previous function - based only on a current through a coil. Relays are available for DC (6-220V) and also AC (6-240V) voltage in a wide range of values. Also available is the version with gold-plated contacts suitable for switching of very small currents. Another function indication of a relay status can be useful in many cases - in a small window next to a test button it's possible to see a small orange ribbon if the relay is switched on.

In our stock can be found 3-4 pole types with 230VAC, 24VAC, 12VDC and 24VDC coils. A very interesting alternative is a possibility of a serial connection of contacts at such multipole relays, what we'll enable us to switch substantially higher DC voltage.

Advantages / Features:

1. industrial relays (2-4 poles)
2. for socket and also for PCB
3. 10A (20A)/ 250(400)VAC
4. DC and AC coils 6-240V
5. possibility of mechanical testing of switching and detent
6. several sockets for a DIN rail and PCB
7. wide scale of accessories



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
6096	55.34.8.230.0040	General purpose relay 230VAC 7A 4c 17000R Plug-in	4,00€
7181	55.34.9.024.0040	General purpose relay 24VDC 7A 4c 600R Plug-in	3,83€
47952	60.13.9.024.0040	General purpose relay 24VDC 10A 3c 445R Plug-in	5,67€
47953	60.13.8.230.0040	General purpose relay 230VAC 10A 3c 7250R Plug-in	6,12€

QUECTEL Quectel UC20 integrates GSM and GPS into a single module

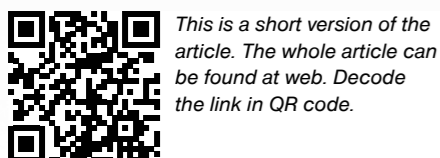
UC20 module already provides besides a high speed UMTS/HSPA+ data transfer even the reception of data from GPS/ Glonass satellites.

When company Quectel launched on the market the UC20 3G module a few months ago, they also announced a forthcoming enhancement of functionality for reception of GPS/Glonass. We can unveil with pleasure, that reception of GPS/ Glonass signal via the UC20 module is already a reality and so this module has become one of the most versatile communication modules on the market. Combination of GSM/GPS/Glonass enables for example to design a device for monitoring of position of vehicles, goods, etc, by means of a single module.



Advantages / Features:

1. top-level UMTS/ HSPA module with support of GPS/Glonass
2. GSM/EDGE: 850/900/ 1800/ 1900 MHz
3. HSPA+, max. 14.4 Mbps (DL)/ 5.6 Mbps (UL)
4. many functions and interfaces - USB/UART/USIM/Audio PCM/ADC/ NETLIGHT...
5. USB drivers for Windows (Linux and Android in development)
6. also available in a form of the Mini-PCIe module



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.

Order no.	Type	Description	Guide price
118907	UC20-E	WCDMA module UMTS/HSPA/EDGE/GPRS/GSM + GPS/GLONASS	32,90€
153526	UC20-E-MINIPICIE	PCI Express module UMTS/HSPAGSM/GPRS/EDGE + GPS/GLONASS	36,90€

ebmpapst

Do you need a radical solution of ventilation or cooling?



Radial (centrifugal) fans EBM Papst RadiCal series represent a top in efficiency, power and a silent operation.

Despite the fact, that basic fan types are known for decades, there 's still a space for improvement. A justification of this is a series of radial (centrifugal) fans RadiCal with backward curved blades from company EBM Papst. Thanks to a high-strength fiberglass reinforced compound, EBM Papst managed to design impeller and blades in respect to perfectly meet aerodynamic requirements for a high efficiency and a low noise. In principle, the biggest pressure build-up in these types is directly in the impeller, that 's why centrifugal fans aren 't sensitive to an exact housing shape near the air exhaust.

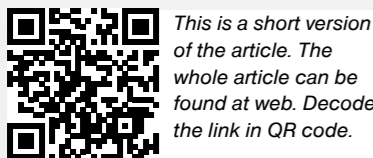


High quality material of blades and impeller is highly resistant to ageing and corrosion (for example also to a salt water) and it 's UV resistant. The RadiCal series contains wide range of sizes from 133 to 630 mm. Majority of types is available in a basic version, intended for insertion into a suitable holder/ housing or also with an integrated holder - support basket.

In respect to a reliable, quiet and energy efficient operation, fans of the RadiCal series are suitable for a wide range of appliances like cooling of electronics, computers and servers, HVAC, heat recovery systems, etc.

Advantages / Features:

1. top-level centrifugal fans
2. unusually silent operation
3. compact dimensions at a high power
4. long lifetime
5. also available energy-efficient EC versions



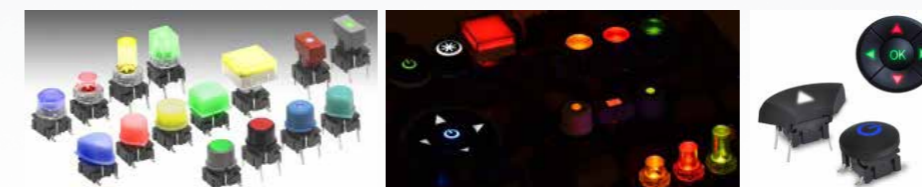
This is a short version of the article. The whole article can be found at web. Decode the link in QR code.

Order no.	Type	Description	Guide price
127967	R2E220-RA38-01	Radial fan dia.220mm 230VAC 88W	73,30€
133921	R2E190-RA26-05	AC centrifugal fan 190mm 230VAC 370mA Ball	65,20€

MEC push-buttons can be found even in the dark

Illuminated push-buttons represent a universal solution into every environment.

An answer to a question, whether it 's nicer to use a push-button with a backlight or not is perhaps a fully subjective matter. However besides an aesthetic point of view we know about at least two main reasons to use an illuminated push-button: easier orientation/ operation in a dark environment and an indication of a push-button status (activation of a given function). In our offer can be found the best from this segment - components from a Danish MEC with over 70 years experience in production of push-buttons and switches.



Basic production portfolio of MEC switches can be divided into series „3“, „4“ and „5“. Series „5“ i.e. for example 5G or 5E is the newest and the most perspective series, but also the „2“ or „4“ series are still popular. Types like 4FTH922 or 5GTH9358222 (4ATH98222) represent a ready-made solution with an LED. This type has besides a reliability, pleasant actuation and a crisp sound at switching yet one positive feature - it can be equipped with any 3mm LED. Perhaps the biggest advantage of this solution is a possibility to use a whatever LED according to your choice and this way to make a customized push-button (especially in smaller production batches).

Order no.	Type	Description	Guide price
37325	3FTL6	Multimec Switch to PCB 10x10mm 3N 1mm	0,84€
37379	1E031	Multimec Cap for 3F/4F D9,6mm Grey+Transp.Dot Lens	0,49€
81496	4FTH922	Illumecc Switch to PCB 10x10mm Green LED	2,31€
102318		Multimec Switch to PCB 10x10mm 3,5N Red/Green LED	2,77€



Advantages / Features:

1. top quality push-buttons with a pleasant operation (actuation)
2. also available „high temperature“ versions (-40/+160°C)
3. possibility to add backlight even with your own LED
4. versions with a various actuation force (2/3.5/ 6 N,...)

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



SCHURTER Say stop to unwanted „visitors“

ELECTRONIC COMPONENTS

EMI mains filters Schurter combined with an input AC connector will stop interference there, where it 's the most efficient - at the input.

Reasons why to use a filter or other EMI suppressing components are well known. In general here belongs a protection of circuits from unwanted influence (digital and analogue circuits), as well as protection from damage to a device in an urgent case. EMI is in general a "silent killer", as it appears with a various intensity and often absolutely irregularly.

Interference in mains can be described in four categories:

- fluctuations (voltage) in an industrial network
- harmonic interference in a range of 100Hz to 2 kHz
- transient interference in a range up to 300 MHz
- sinusoidal high frequency interference up to 1GHz (or even more)

EMI filters are available in various versions and they use to be the most effective if they are directly on the device input. Swiss company Schurter as a specialist in a given segment offers a wide range of filters combined with an AC inlet socket or also with a switch and fuses. An advantage is that by using such a module, you 'll manage four components by one component and also their mechanical assembly to a panel.

In practice, interference appears mainly in last three categories.

Advantages / Features:

1. efficient protection from interference and consequent faults in devices
2. many types are available exactly by the application demands
3. filter+switch+fuse+socket = 4in1

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
6903	FIL2470	IEC Inlet Filter 250V/10A	6,17€
69999	FKH2-50-6/ I-A	Power Entry Modul Filter 6A+Fuse+2P Switch+Inlet AL	17,50€

Electromechanics and Assembly

NEUTRIK Neutrik Audio-Video Connectors	Attend Attend Memory and SIM Card Holders	bel Bel-Stewart MagJacks	Belden Belden Group Industrial Connectors Hirschmann & Lumberg
HARTING Harting DIN 41612, IDC and Industrial Connectors	ASSMANN Assman D-SUB, Modular and USB Connectors	TE connectivity TE connectivity Soft shell and Industrial Connectors, Relays	SKS SKS Laboratory Program Cords, Clips, Tips
WAGO Wago Installation and Panel Connectors, DIN-rail Terminals	euroclamp Euroclamp Installation and Panel Connectors, Terminals	LAPPKABEL Lappkabel Cables and Industrial Connectors	poschel Puschel Fuses
MARQUARDT Marquardt Switches and Push-Buttons	mec Mec Switches and Push-Buttons	SCHURTER Schurter Fuses, Fuse Holders, Connectors, Filters and Antivandal Buttons	Multi-Contact MC Multi Contact Test & Measurement and Industrial Connectors
FUJITSU Fujitsu Relays	finder Finder Relays	Standex Meder Meder Reed Relays and Sensors	

SUNON Sunon Fans	ebmpapst EBM-Papst Fans	fischer elektronik Fischer Heatsinks and Accessories
HAMMOND MANUFACTURING Hammond Enclosures	TEKO Teko Enclosures	GAMA aluminium Gama aluminium Heatsinks

PHOENIX CONTACT Phoenix DIN-rail Enclosures, Terminals and Connectors	ETTINGER Ettinger Assembly Material	NEW AGE ENCLOSURES New Age Enclosures Enclosures
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Communication Modules & Identification

QUECTEL Quectel GSM/ GPRS/ 3G/ GPS	SIMCOM Simcom GSM/ GPRS/ 3G/ GPS	IQRF IQRF Communication Modules
Digi Digi International Communication Modules	AK-Nord AK-Nord Communication Modules	2J antenna concept 2J Antennas
WIZNET Wiznet Communication Modules	LANTRONIX Lantronix Communication Modules	AUREL WIRELESS Aurel Communication Modules
SUNBEST Sunbest RFID Identification	StrongLink StrongLink RFID Readers	YITRAN Yitran Communication via Mains Line

Embedded Systems

BOLYMIN Bolymin Embedded Modules	Apacer Apacer Memory Modules	MikroElektronika MikroElektronika Embedded Modules Development kits	Embedded Artists Embedded Artists Embedded Modules Development kits
voipac Voipac Embedded Modules	Digi Digi International Embedded Modules	UDOO UDOO Embedded Modules	

Automation

OMRON Omron Industrial Automation	trumeter Trumeter Industrial Automation	PEPPERL+FUCHS Pepperl & Fuchs Industrial Automation
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Optoelectronics and Electroacoustics

OSRAM Osram High-power LEDs	Kingbright Kingbright LEDs and LED displays
ELECTRONIC ASSEMBLY Electronic Assembly LCD, TFT and OLED Displays and Modules	BOLYMIN Bolymin LCD and OLED Displays and Modules
display Display Elektronik LCD, TFT Displays and Modules	WINSTAR Winstar TFT Displays and Modules
4D Systems 4D Systems Intelligent TFT Display Modules	Bodet Bodet Electromechanical displays
sonitron Sonitron Piezo Speakers and Buzzers	VISATON Visaton Loudspeakers

Semiconductors & Sensors

Diodec Diodec Discrete Semiconductors	SEMIKRON Semikron High-power Discrete Semiconductors	FTDI Chip FTDI USB Interface Circuits	LINEAR TECHNOLOGY Linear Technology High-performance Analogue Integrated Circuits	STMicroelectronics STMicroelectronics High-performance Analogue Integrated Circuits
ATMEL Atmel Microcontrollers and Memories	MICROCHIP Microchip Microcontrollers, Memories and Analogue Circuits	SENSIRION Sensirion Temperature, Pressure, Humidity and Flow Sensors	FIGARO Figaro Gas Sensors	ELNEC Eldec Programmiers

Power Management

TRACO POWER Traco Power DC/DC and AC/DC modules	MEAN WELL MeanWell DC/DC and AC/DC modules	FRIWO Friwo Adapters, Power Supplies and Chargers	MINWA Minwa Adapters, Power Supplies and Chargers	DIAMETRAL Diametral Laboratory Power Supplies and Laboratory Furniture
Elektro-Automatik Elektro-Automatik High-power Laboratory Power Supplies	tecXUS Tecvus Batteries	XENO ENERGY Xeno Energy Lithium Batteries	AccuCell Accucell Rechargeable Alkaline Batteries	KEYSTONE Keystone Battery Holders, Connectors and Assembly Material

Passive components

YAGEO Yageo Resistors and Capacitors	PIHER Pihier Potentiometers and Resistive Trimmers	Jauch Jauch Crystals and Oscillators	Fine Inductors Fastron Inductors and Chokes	telema Talema Transformers and Coils
SCHURTER Schurter RFI filters	myrra Myrra Transformers and Coils			

Tools

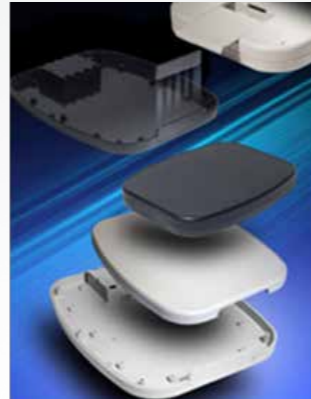
Weller Weller Soldering Equipment	ERSA Ersa Soldering Equipment	CRC CRC-Kontakt chemie Sprays for Electronics	Stannol Stannol Solders	Alpha Alpha Solders
R&S Rohde & Schwarz Testing and Measuring Equipment	HAMEG Hameg Oscilloscopes, Generators, Counters, meters and Power Supplies	UNI-T Unit Digital Multimeters	VOLTCRAFT Voltcraft Digital Multimeters	TOOLCRAFT Toolcraft Tools
			BENNING Benning Industrial Multimeters	DREMEL Dremel Electric tools
				Wiha Wiha Tools



Even in enclosures can be found a tablet - Hammond 1599

One of the newest types of enclosures in the Hammond portfolio are ergonomic oval enclosures perfectly suitable for various industrial controllers.

High quality enclosures from the portfolio of producer Hammond in our offer are probably familiar to you. They usually have a classic right-angle shape, perhaps except handheld enclosures series 1553 or also 1553T. This time we have here a novelty which looks quite different from all common enclosures. It is a series of plastic enclosures 1599 Tablet, specially designed for a construction of various control panels using joysticks, touch screens, membrane keyboards and other control elements. Enclosures are developed with an aim to reach an ergonomic shape and just the round corners ensure significantly better grip preventing fatigue of operator's hands.



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Advantages / Features:

1. ergonomic oval enclosures intended for various controllers
2. available in 2 sizes
3. dust protection - IP54
4. also available versions with a battery compartment (4xAA or 2x 9V)
5. light grey (RAL 7035) or black color
6. flame retardant ABS (UL94-V0)

Company Hammond comes right with several versions and so we can choose smaller (1599TABM), bigger (1599TABL), light grey (RAL7035) or black, without or with a battery compartment. As usually, an enclosure is supplied with screws and at battery versions also with battery contacts for 4x AA batteries and 2 pcs of 9V batteries.

Order no.	Type	Description	Guide price
131380	1599TABLBKBAT	Enclosure ABS FR 240x190x30mm Black	14,50€
153278	1599TABMGY	Enclosure ABS 170x135x27mm Grey	9,60€

Maintenance-free lead batteries Panasonic will surprise by their lifetime



When observing basic rules will the top quality AGM VRLA batteries last you up to 15 years - we will advise how.

This description could start by a long list of technical improvements of Panasonic batteries, thanks to which they gained a stable place on the top of development in this segment (AGM, expanded positive grid, additives for regeneration from a deep discharge, self-extinguishing container material, ...). However those are things, which can be easily checked up from available internet source or even better from satisfied users. Instead of it, we better bring you a few advices for usage of VRLA/ SLA batteries to serve you as long as possible:

- batteries can be recharged by several ways, but one of the most reliable belongs a „constant voltage/ limited current“ method, i.e. observing max. 2.45V/ cell and a current limitation.
- battery lifetime grows significantly with a decreasing temperature, i.e. it is very important to place a battery far from heat sources (transformer, ...)
- number of cycles (thus a battery lifetime) is very strongly dependent on a level of discharge before consequent recharging. Dependence is so strong, that for example at discharging to 50% a standard battery will reach a lifetime of approx. 500 cycles, while when discharged in 30% (remains 70% of capacity), the number of cycles will increase up to 1200 (!).
- if possible, avoid usage of battery on 100% discharge (so called deep discharge).
- real capacity of a battery (amount of energy, which we'll get out of it) is strongly dependent on a discharge current. 100% capacity can be reached at a current of 0.05CA/ 20°C. At 0,25CA current it is approx. 75% of capacity and at a current of 1CA it is only approx. 55%. This fact also says for a sufficient sizing of a battery.

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Above mentioned values apply to standard Panasonic batteries. In the offer of company Panasonic can also be found types with extra long lifetime as well as so called „Power“ types, suitable for high current devices (UPS,...).

Order no.	Type	Description	Guide price
2586	LCR12-6	Lead Acid Battery 6V 12Ah 151x50x94mm	23,00€
3806	LCR12-12	Lead Acid Battery 12V 12Ah 151x102x94mm	43,40€
5119	LCR7,2-6	Lead Acid Battery 6V 7,2Ah 150x34x100mm	17,70€
6532	LCR3,4-12	Lead Acid Battery 12V 3,4Ah 134x67x60mm	24,70€

10 years of operation on 1 battery?



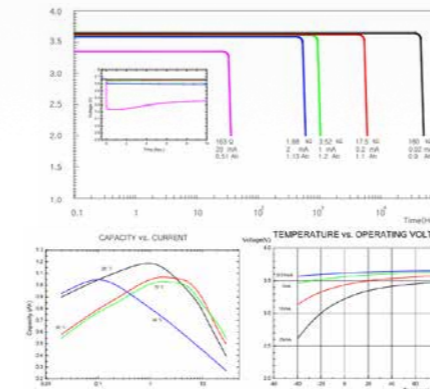
Xeno Lithium batteries offer high capacity at extremely low (self-discharge) and are able to supply your device for many years.



Primary Lithium batteries (Lithium thionyl-chloride, LiSOCl₂) represent batteries with the highest energy density (Wh/kg), moreover able to operate without problems even in strong frosts. Perhaps their only technical "drawback" is the fact, that they're only suitable for appliances with low current demands (up to tens of mA). In principle are the Lithium primary (non-rechargeable) batteries suitable for backup (for example memories) and for power supplying devices with low power consumption, where it's possible to reach even more than 10 years lifetime. This is naturally a huge benefit, as it enables to construct a device fully independent from external power supply, or without necessity of an external power supply and similar. At the same time it will also eliminate necessity to use an adapter or further electric installation.

Maximum capacity usage can be reached at a certain range of discharge currents (according to a diagram at every battery type). If a Lithium battery is intended to supply circuits with a short-time pulse demands, it's very suitable to use a large capacitor or a supercapacitor connected in parallel with a battery. Nominal voltage of LiSOCl₂ batteries is 3,6V and a big advantage is a wide operating temperature range -55 to +85°C (max 150°C). Company Xeno Energy is a producer specializing in Lithium batteries and as one of few in the world they have an ISO13485 certification for usage of batteries in medical devices.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Advantages / Features:

1. 3.6V primary batteries with extremely low self-discharge 1-2%/ year (@20°C)
2. wide operating temperatures range -55 to +85°C (max +150°C)
3. stable voltage through all lifetime
4. many versions with various terminals are available
5. ISO 9001:2008, ISO 13458:2003

Order no.	Type	Description	Guide price
49192	XL-050F T1	Battery Lithium 1/2AA 3,6V 1,2Ah	2,58€
49195	XL-055F AX	Battery Lithium 2/3AA 3,6V 1,65Ah Axial	3,31€

Economic series of Traco TPC power sources on stock even in low power versions



DIN-rail AC/DC modules of the TPC series will provide even to you device a reliable power source for an affordable price and compliance to latest energy regulations (ErP).

Why to choose just the TPC series?

TPC series represents an "economy" series in the best meaning, i.e. it offers very good features for a very affordable price. Even this series features high efficiency in the whole load range, low ripple and noise and naturally an overload/ shortcut protection.

Outer dimensions (height and depth) of various types of the TPC series are the same, only the width varies. At the sight on TPC030 will be probably everybody pleasantly surprised by very compact dimensions - i.e. by a low width - only 26,5 mm. „Power good“ signal and a possibility of a remote switching on/off make these modules suitable even for large-scale/ remotely controlled systems.



Advantages / Features:

1. universal industrial AC/DC power supplies with an excellent price/ performance ratio
2. compliant with the ErP European directive, <0,5W standby
3. high efficiency in the whole power range
4. adjustable output voltage

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
130102	TPC030-124	AC/DC module 30W 85-264VAC/24VDC/1,25A DIN	34,20€
132189	TPC120-124	AC/DC module 120W 85-264VAC/24VDC/5A DIN	54,40€
137172	TPC055-112	AC/DC module 42W 85-264VAC/12VDC/3,5A DIN	34,40€
137174	TPC080-124	AC/DC module 80W 85-264VAC/24VDC/3,3A DIN	46,30€

WizFi250 - WiFi quickly, easily and cost-effectively



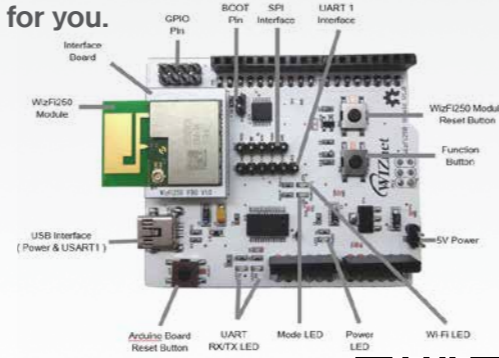
WiFi 802.11 b/g/n module usable immediately and with a minimum effort may be the right solution even for you.



There are many types of WiFi modules with various features on the market. For example recently described WizFi630 is literally full of functions, which take it into a class of routers.

On the other hand a novelty WizFi250 has somewhat less functionality but meets all common requirements for a compact and easily applicable WiFi module suitable for a mass usage into various devices and it adds an important bonus - a very competitive price. WizFi250 provides all necessary for a simple usage -

an integrated RF amplifier, antenna, low power consumption, 1MB Flash and secure protocols (WEP, WPA, WPA2PSK) and mainly easy control by simple AT commands. Thanks to its features is the WizFi 250 suitable for all common 8/16/32 bit microcontrollers. For the development support we also keep in stock the WizFi250-EVB development board.



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
152969	WizFi 250	Optimized WiFi module 802.11b/g/n with RF power amp.	18,90€
153485	WizFi 250-EVB	Evaluation Board for WizFi250 module	51,30€

Long development or better a short time to market?

The solution is an embedded module.

Swedish company Embedded Artists will help you in tit by their top class modules with NXP processors.



As requirements for functionality of devices are increasing, including audio/video output, network- and USB connectivity, as well as a possibility to be programmed by a user, to change firmware, etc, the development is more and more demanding. For small and middle-sized companies it can easily happen, that in respect to a supposed sale, the expenses will never return. In the most cases, it's better and at the end of the day even cheaper to rely on some of so called embedded modules. An embedded module (depending on a type) usually provides all necessary for controlling of our device and it is usually easily programmable thanks to a standard OS implemented (Linux, Android, Windows,...).

Among Embedded Artists can be found:

- development kits
- OEM boards suitable for direct usage in products
- „quick-start“ boards
- education boards
- display boards
- various accessories for development support

From a final product and production point of view, the most interesting are the OEM modules.



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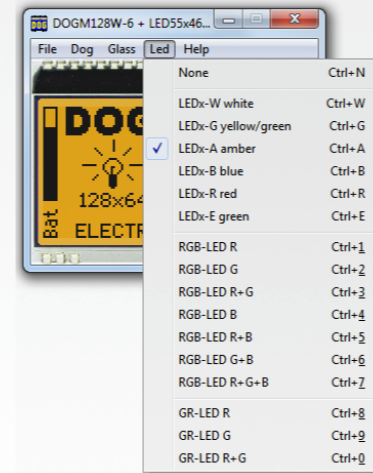
Advantages / Features:

1. top-class modules with NXP processors
2. excellent price/ performance ratio
3. development kits as well as cheap OEM modules available
4. various accessories including LCD modules and the e-paper module available

Order no.	Type	Description	Guide price
151063	EA-APP-001	Android Open Accessory Application (AOAA) Kit	64,40€
151067	EA-APP-002	Low-Power Application Kit (Oryx)	78,10€
151086	EA-LCD-009	E-paper Display Module 2.7"	37,90€
151093	EA-QSB-015 (LPC11U35)	LPC11U35 QuickStart Board	25,40€

ELECTRONIC ASSEMBLY Start with the EA DOG displays for free

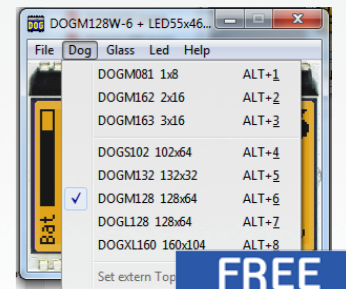
Software simulator for Electronic Assembly display EA DOG series will bring you a clear image about possibilities of this favorite series.



Usually, when we start working with some monochromatic display with a color backlight, we have to imagine which combination of display/backlight would suit us the best. It isn't hard but for sure even here is valid, that "it's better to see once than to hear three times".

For this purpose will serve well a simple application StartDog, in which you can "try" for free various EA DOG series displays in combination with various color backlight (including RGB). This application will simplify your choice of a display without useless expenses. Besides a possibility to choose types themselves (with various resolution), it's also possible to choose 4 basic kinds of "glasses": STN positive Y/G, STN negative blue, FSTN positive and FSTN negative.

Application StartDog also cooperates with the EA9780-2USB development board and so the text or image displayed on your PC can be seen also on the EA DOG series display.



FREE SOFTWARE

Advantages / Features:

1. compact LCD character and graphic modules with a selectable backlight - various combinations are possible
2. 1x8 - 2x16 - 3x16 - 4x20, +5V / +3.3V
3. 102x32 .. 240x128, +3,3V
4. extremely flat: only 2.0 mm without backlight and 5.8 mm with backlight
5. can be soldered directly into the PCB without any further assembly
6. character displays: 4-bit, 8-bit and SPI interface
7. graphic displays: SPI interface, some also I2C
8. 3.3V or 5V - also for the LED backlighting



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
51746	EADOGM081B-A	LCM char. 1x8/STN Blue neg. transmissive	8,70€
69512	EADOG128B-6	LCM graphic 128x64 Blue neg. Transmissive Large	15,20€
78653	EADOGXL160W-7	LCM graphic 160x104 White Pos. Transflective	27,20€
91206	EA9780-2USB	LCD EVB kit for EA DOG series module	42,40€

Do you produce devices for medical segment?

Adapters with an attribute „medical“ can help you to meet stringent requirements for this segment.



Advantages / Features:

1. top quality OEM adapters for medical devices producers
2. high reliability
3. global input voltage range 100-240V/50-60Hz
4. very low standby consumption, EuP2
5. very low leakage current <10uA
6. continuous shortcut proof
7. LED indication of operation

If you produce a device with a supposal to be used in a hospital or in a medical segment in general, it's naturally necessary that it must meet more stringent requirement.

High reliability and a high isolation (primary/ secondary winding) belong to basic requirements. Adapters Friwo - medical meet these and also many other requirements and they also gained many international attests. In the Friwo portfolio can be found a wide range of various medical adapters with power of 3-30W, „desktop“ adapters with power of 12-150W and also „open frame“ modules with power of 65-250W.

In our stock a universal type GPP18M (1890856, FW7556M) can be found, with a 12V/1500 mA output. Now we offer you a GPP18 Medic set containing a power source, AC Euro inlet adapter and an output DC connector 5,5/2,5/11,5mm for an exceptional price.



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



We offer you these adapters from our stock. Order number is 157462 and guide price is 11,90 EUR without VAT.

Uncompromising quality audio connectors for a compromising price



Long term reliable contact without interference, creaking and hum, moreover in a beautiful coat - these are the Neutrik / Rean connectors.

Advantages / Features:

1. top quality connectors for segment audio/ video segment
2. excellent price/ quality ratio
3. precision construction to the deepest detail
4. wide portfolio

Connectors have in general one interesting feature - there are many similar or almost the same connectors on the market. Even though they look the same, many times there are huge differences in price and mainly in quality. A real difference between a quality and a low-class connector can be known only at a close-detail investigation and comparison, and ideally after a real testing in praxis. Naturally, if a producer wants to achieve success on a market, it's often simply impossible to use a too expensive connector, which would over-price the whole device.



That's why you can find in our store the Neutrik / Rean connectors offering a high-end class for a very reasonable price. Company Neutrik specializes already for almost 40 years in audio connectors and in general connectors for audio/ video studios, equipment of concerts (backstage) and similar, that's why also in loudspeaker connectors, power supply, Ethernet, ... In the Neutrik products can also be found connectors Rean representing even more affordable price level while maintaining a very high quality. Already a short look at details of Neutrik/ Rean connectors will tell us, that we're dealing with precision connectors. A matter of course is a detailed documentation with an exact description of electrical features and materials used.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
52904	NC3MX	XLR M cable connector 3P, nickel	2,82€
53788	NAC3FCB	Power supply M cable connector 3P 20A grey-blue	5,39€
67515	JM-35SMA	Jack M 3,5 stereo cable connector 90°, nickel, HQ	3,04€
69012	NYS352BG	Cinch M cable connector, black metal, gold plated contacts	0,83€

WINSTAR Displays for those, who want to have everything under control



If you want to go to the heart of a thing, then LCD TFT displays Winstar are right for you.

Advantages / Features:

1. quality TFT LCD from a well proven producer
2. built-in modern controller IC SSD1963
3. LED backlight
4. resistive touch panel
5. on stock in three sizes - 4.3", 5.7" and 7.0"

It can be said, that nowadays in the most cases it's cheaper and faster to use a ready-made graphic module. From this category we keep in stock for example eDIP TFT modules from company Electronic Assembly, intelligent modules from company 4D Systems or also a hot novelty from company FTDI - technology EVE. Naturally, despite this, it's possible, that simply a ready-made intelligent module which would meet all your demands simply doesn't exist. For these cases we have for you color TFT LCD displays from company WinStar (Taiwan). In our standard stock offer can be found displays WF43GTIB (4.3", 480x272), WF57ETIB (5.7", 320x240) and WF70HTIF (7.0", 800x480). Displays incorporate a modern display controller SSD1963 supporting various communication formats, that's why they offer so to say a free hand and a full control at your design.



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Order no.	Type	Description	Guide price
153430	WF43GTIBEDBT0	TFT-LCD 4,3" module 480x272 + 16Bits + RTP	43,65€
153460	WF57ETIBCBDBT0	TFT-LCD 5,7" module 320x240 + 16Bits + RTP	65,50€
153469	WF70HTIFGDBT0	TFT-LCD 7,0" module 800x480 + 16Bits + RTP	61,10€

BOLYMIN BE220 - intelligent embedded platform suitable even for a harsh environment!

Well-proven embedded mini PC with Windows CE - BEGA220 are now available in the IP66 protection class.

Bega220 as a universal microcomputer with an OS and a 7" touch display already found its place in many applications. Now company Bolymin launched on the market an improved version resistant to dust and water (IP66) - the BE220C module. IP66 resistance applies to a front side and a bezel, what's in the vast majority cases fully sufficient, because in praxis the module is always installed into a target device. BE220C maintains all features of the Bega220 series. BE220C is supplied with a cable for connection to a communication connector on a bottom side of the module and also with a USB reduction (for connection of a keyboard or a mouse). The module should be powered by a 12V/1-1,2A adapter with a 5,5/2,5 mm DC connector. Also supplied is the CD with a user manual, software development kit (SDK) and code examples. BE220C can be used (similarly like Bega220) for control of any devices or processes while maintaining an advantage of an easy programming in the Windows environment and compatibility with widely available software for a PC.

BE220C is supplied with a cable for connection to a communication connector on a bottom side of the module and also with a USB reduction (for connection of a keyboard or a mouse). The module should be powered by a 12V/1-1,2A adapter with a 5,5/2,5 mm DC connector. Also supplied is the CD with a user manual, software development kit (SDK) and code examples. BE220C can be used (similarly like Bega220) for control of any devices or processes while maintaining an advantage of an easy programming in the Windows environment and compatibility with widely available software for a PC.



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We offer you intelligent embedded platform BE220 from our stock. Order number is 150771 and guide price is 278 EUR without VAT.

Advantages / Features:

1. 400MHz 32 bit RISC architecture
2. 2GB NAND Flash / 64MB DDRII memory
3. 7" 800x480px color display with a LED backlight
4. 10 / 100Mbps Ethernet s RJ45
5. 1 x isolated RS485 / 422
6. 3 x RS232 / 1 x SPI



Desolder professionally with NO-CLEAN flux wicks

Desoldering braid makes an invaluable service at development or rework.

Everyone who's ever tried to suck off a solder from a solder pad by means of a solder absorbing braid (wick) will probably confirm, that this tool belongs to a "must have" equipment of every professional or amateur workplace. What's the charm of a desoldering braid? Above all in the fact, that it's able to absorb almost all the solder from a given place, thus the most of components can be loosened very easily.

A quality desoldering braid is usually able to absorb a solder so thoroughly, that only a microscopic layer of a solder will remain on a PCB - as if a board was new, unused. It is very advantageous even at a hand rework of SMT components, because it's desirable the component to lay directly on a board - not askew in a thick solder layer.

A novelty in our portfolio is the novelty from company CRC Industries - braid SOLDABSORB.

Advantages / Features:

1. efficient tool absorbing a solder from a PCB
2. invaluable helper at development or rework
3. made of fine-gauged pure copper
4. synthetic „No-clean“ flux
5. packed in a blister in 2 pcs

We keep Soldabsorb in a width of 1.5 and 2.5mm, packed in a blister in 2 pcs (the price is for 2 pcs). Soldabsorb represents a top-level in this segment and is made of a highly pure copper, fine gauge wires and contains a synthetic NO-CLEAN flux. It means, that the flux residues are non-conductive and non-corrosive and they can be left on a PCB. Very fine wires contribute to a high wicking (absorbing) ability.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Order no.	Type	Description	Guide price
154505	SOLDABSORB1,5MX1,5	Desoldering Braid with No-Clean flux 2pcs.	6,80€/pcs.
154511	SOLDABSORB1,5MX2,5	Desoldering Braid with No-Clean flux 2pcs.	7,20€/pcs.

MARQUARDT Marquardt 5000 series push buttons won't be scared of dust and water

Why is it worth to use a push-button with a declared resistance to dust and water even in a common environment?

In case, that a device is used outdoor, it is usually a necessity. But how is it in the case, that a device will be operated indoor in a relatively "good" environment? Despite the fact, that to use a push button with a higher IP class usually means somewhat higher price, but it provides one big advantage - reliability.

In the nowadays „microprocessor“ age, it's very often, that the control buttons switch only a minimal current. As a result, this small current isn't able to act as self-cleaning for contacts and the switches fail prematurely. Even in these cases, it's beneficial, when a push button is more resistant to dust and water.

Marquardt 5000.0501 is a literally universal push button, because it features an IP54 protection class from both sides. It's able to switch 4(2)A/250V AC and a plus is also a high mechanical lifetime - up to 200.000 cycles. Relatively higher driving force and a sufficiently long travel (4mm) acts also as a protection against accidental operation.

We offer you Marquardt 5000 series push buttons from our stock. Order number is 49401 and guide price is 2,62 EUR without VAT.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Advantages / Features:

1. single-pole push button (SPNO, momentary)
2. IP54 protection class
3. IEC 4 (2)A/ 250V AC/ 20E4
4. fiber-glass reinforced PA, UL94-V2 flammability
5. silver plated terminals 2.8x0.8 mm



SUNON® Choose a fan with a low noise and low power consumption

Silence at last - or what to do, if a silent operation of a fan matters to us?

If dimensions of a device allow it, it's usually better and more silent solution to use a fan with a bigger diameter and a lower rotation speed. However, what to do when the size and a design of a fan suit us, but a power, rotation speed and consequently a noise are still uselessly high?

A partial solution is to decrease a supply voltage.

By a change of a supply voltage, we can change a fan speed, but it's not possible to go below certain speed (at a given fan type). It's common, that for example a 12V fan still works at 4V (when decreasing from 12 to 4V) but it's already not able to start at such a low voltage.

Probably the best solution is to use a slower fan (with a lower rotation speed). Today almost every series of fans is available in 2-3 power levels, what reflects in a noise but also in different power consumption. This can be illustrated on 2 types of the same construction MEC0251V1-A99 (MEC0251V1-0000) and MEC0251V3-A99 (MEC0251V3-0000). As for a mechanical construction, they are the same. The only difference is only in a rotation speed - 3100 vs. 2200 turns per minute. The noise difference 10,5 dB is really big (6 dB difference is subjectively perceived as a double volume) and in many cases it's surely not negligible even a power consumption difference of approx. -65%.



This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Advantages / Features:

1. possibility to choose a fan exactly by the application requirements
2. lower noise
3. lower power consumption
4. longer supposed lifetime at lower rotation speed

Order no.	Type	Description	Guide price
70303	MEC0251V3-A99	Fan 120x25 12VDC 1,9W 127,43m3/h VAPO	6,90€
77358	ME92251V3-C99_WIRE	Fan 92x25 12VDC 1,3W 67,11m3/h VAPO 3w.	3,40€
130842	EB60251S3-999	Fan 60x25 12VDC 0,77W 27m3/h Sleeve	2,35€

STS21 measures temperature with an 0.01 °C resolution

Complete digital temperature sensor Sensirion STS21 provides a top-level accuracy and stability for a very affordable price.

Digital sensor STS21 is the newest member of calibrated humidity and temperature sensors family SHT2x (SHT21, SHT25). In opposite to them, STS21 is able to measure only temperature, i.e. it's suitable only for applications, where we don't need to measure humidity. However a smaller functionality has also a significant positive aspect in a form of a substantially lower price. STS21 contains on a chip, similarly like its familiar, a temperature sensor, precise supply, low noise linear amplifier, AD converter and a serial interface with I2C output (fixed address different from SHT series).

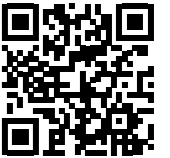
Basic accuracy of STS21 in the 0 to +60°C temperature range is +0.2°C. The user can choose a resolution for measuring and it can be 11-14 bits (up to 0,01°C). Despite the fact, that the sensor hasn't guaranteed absolute accuracy of 0.01°C, such a high resolution can be beneficial for example for monitoring of a tendency (increasing/ decreasing) of temperature.

SENSIRION
THE SENSOR COMPANY



We offer you sensor STS21 from our stock. Order number is 113285 and guide price is 1,70 EUR without VAT.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code.



Advantages / Features:

1. calibrated temperature sensor
2. extremely compact dimensions 3 x 3 x 1,1 mm
3. digital output with I2C interface (Hold/No Hold Master)
4. 14 bit resolution (user selectable 11-14 bit)

LAPP GROUP If a cable, then the Lapp cable

56 years of experience, 40 000 standard stock products and 1000 patents reflect in quality and a wide portfolio of German company LappKabel.

Advantages / Features:

1. top-quality products for an affordable price
2. more than 50 years of experience
3. very wide portfolio
4. also available are special customized versions

There are many producers of wires, leads and cables, but despite it, company LappKabel belongs to one of the most renowned. Cables from Lapp Kabel are widely used in various industry segments like for example food industry (Coca-Cola), tire production (Continental), marine and ports infrastructure (Hamburg), chemical industry, solar and wind energy,...

A common feature of LappKabel products is also an excellent quality for a reasonable price.

Among LappKabel products can be found not only interconnecting and controlling cables (Olflex) but also cables and systems

for data transmission (ETHERLINE and UNITRONIC), industrial connectors (EPIC), systems for cable protection (SILVYN), optical systems (HITRONIC), cable gland (SKINTOP), marking systems, tools and various other accessories. The newest addition in our stock are universal flexible leads 0,5/ 0,75 and 1,0 mm2, suitable for any installations in devices.

This is a short version of the article. The whole article can be found at web. Decode the link in QR code. The article is accompanied by video.



Order no.	Type	Description	Guide price
70545	H05V-K-0,5-BK	Cable 1-Wire 0,5mm2 Black	9,57€
70553	H05V-K-0,75-RD	Cable 1-Wire 0,75mm2 Red	12,11€
70557	H05V-K-1,0-BN	Cable 1-Wire 1,0mm2 Brown	16,10€

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WIORE

Control your home, wherever you are! Wiore enables remote control over Elro wireless electrical outlets and light switches from anywhere in the world using a web browser.



Hjelmslund Electronics

USB485-STIXL

USB to RS485 converter with isolation barrier. The USB485-STIXL is the latest member of our RS485 converter series, featuring 2 wire RS485 with automatic receive / transmit switching, fifo and a 2.5kVolt isolation barrier.



ELCOM, s.r.o., Prešov

Uniq Tablet

Uniq Tablet is the perfect touch mobile computer for those, who are at work often move outdoors or indoors and work in difficult conditions. It is suitable for handling in the dusty and humid environment and it is resistant to a fall up to 80 cm height.



ZADAKO spol. s r. o.

Modem ZadaCOM 4G

ZadaCOM 4G LTE is a reliable and resilient LTE modem designed to meet the requirements of industrial and enterprise customers who need fast, flexible and reliable wireless connection of their devices to Internet.



Elnec s.r.o.

BeeProg2

Extremely fast universal USB/LPT interfaced programmer. Programs 64-Mbit NOR Flash memory less than 9 seconds and 1Gbit NAND Flash less than 70 sec.



Juraj Čaplický - Elektronika

EthMbus-5 - Ethernet to M-Bus communication converter

The EthMbus-5 converter enables communication connection of devices with the M-Bus industrial bus to an Ethernet network.



Embedded Electronics & Solutions, s.r.o.

Configurable intelligent Ethernet RFID reader for 125 kHz

Module is designed as a network node, which takes care of the RFID ISO identification in order to enabling or disabling the access to the object. Device is fully configurable remotely via the LAN connection through easy TCP protocol.



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Last update 09.05.2014 03:29

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PT/2014/8343	1414008343	3.05 EUR	3.66 EUR	30.04.2014	30.04.2014	3.66 EUR	
PT/2014/2047	1414002047	4.22 EUR	5.06 EUR	31.01.2014	31.01.2014	5.06 EUR	
PT/2013/25042	1413025042	3.35 EUR	4.02 EUR	23.12.2013	23.12.2013	4.02 EUR	
PT/2013/15413	1413015413	15.52 EUR	18.62 EUR	12.08.2013	12.08.2013	18.62 EUR	
PT/2013/13192	1413013192	13.85 EUR	16.62 EUR	04.07.2013	04.07.2013	16.62 EUR	
PT/2013/6665	113000070	20.27 EUR	24.32 EUR	03.04.2013	03.04.2013	24.32 EUR	
PT/2012/26559	1412026559	11.93 EUR	14.32 EUR	19.12.2012	19.12.2012	14.32 EUR	
PT/2012/17653	1412017653	36.55 EUR	43.86 EUR	27.08.2012	27.08.2012	43.86 EUR	

PT/2014/2047

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 Currency: EUR
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 Payment Method: Bank Transfer

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44803	UT 33 C	Digital multimeter 3.5 U.I(DC),R.T.D.buzzer	4.2217	1	4.22 EUR

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	116994	NIMH RTU 2300 AA TECXUS BP2 , Accu NIMH RTU 1,2V 2300mAh AA				1.2664 EUR /1pc	2 pcs
	70887	HR-3UTGA2000 , Accumulator NIMH 1,2V AA 1pc				1.3474 EUR /1pc	2 pcs
PT/2012/17653	1412017653	36.55 EUR	43.86 EUR	27.08.2012	27.08.2012	43.86 EUR	
	116994	NIMH RTU 2300 AA TECXUS BP2 , Accu NIMH RTU 1,2V 2300mAh AA				1.21 EUR /1pc	4 pcs

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Invoice No.	Variable symbol	Amount excl. VAT	Amount to be paid	Date of Issue	Due Date	Paid	Show
PT/2013/15413	1413015413	15.52 EUR	18.62 EUR	12.08.2013	12.08.2013	18.62 EUR	
	116994	NIMH RTU 2300 AA TECXUS BP2 , Accu NIMH RTU 1,2V 2300mAh AA				1.2664 EUR /1pc	2 pcs
	70887	HR-3UTGA2000 , Accumulator NIMH 1,2V AA 1pc				1.3474 EUR /1pc	2 pcs
PT/2012/17653	1412017653	36.55 EUR	43.86 EUR	27.08.2012	27.08.2012	43.86 EUR	
	116994	NIMH RTU 2300 AA TECXUS BP2 , Accu NIMH RTU 1,2V 2300mAh AA				1.21 EUR /1pc	4 pcs

Price excl.VAT

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