

Product Overview

Rate Totalizers • Batch Controllers • Flow Computers • Signal Conditioners • Process Indicators
Counters • Timers • Digital Panel Meters • Gaming Meters
PLC Interfaces & HMI Software



KEF

Our Company

INTRODUCTION

Kessler Ellis Products (KEP) has been supplying factory floor information display products to its industrial customers for over 40 years. Founded by Corson Ellis Jr. in 1960, KEP started as a distributor of electromechanical counting devices and quickly grew into a full line manufacturer/distributor of counting products.



KEP's 31,000ft² manufacturing facility in Eatontown, NJ

In the early 1980's, KEP broadened its approach from counting applications to include flow measurement and PLC (programmable logic control) interface products. Since 2000 we extended our product offering again by developing Infilink-HMI automation software and introducing graphical touchscreens and operator interfaces. These efforts have resulted in our offering of a powerful and broad line of flow products (from meter mounted indicators and economical batchers to energy flow computers), Industrial Instruments (counters, timers and ratemeters), HMI Software and PLC interfaces.

With our worldwide distribution network, KEP has continued to invest its profits in new product development to insure our ability to meet your growing needs.

We are focused on designing and providing products that are economical and easy to use and operate. Give us a chance to serve you. We will do all we can to prove that choosing KEP was the right choice.

PEOPLE



For nearly 50 years, KEP employees have consistently shown an obsessive concern about our customers. We have always believed that the customer is right, that making the customer happy is the key to our success. We work hard to service your needs or solve your problems. We will take that extra step to ensure complete customer satisfaction. Our commitment to our customers and to these values, more than any other quality, defines what KEP is.

For complete information on all of our offerings and solutions visit us online:

www.kep.com

OUR MARKETS

FLOW MEASUREMENT

KEP seeks to service the flow measurement community by providing versatile, economical instrumentation and "know how" to our users. Our flow measurement products include: field indicators, ratemeter/totalizers, batchers, process & level indicators and sophisticated flow computers. We offer advanced communication features such as: RS-232, RS-485 with Modbus RTU protocol, Modem, Modbus TCP and Wireless support. We are experts in interfacing with all types of primary flow sensors. We assist users by providing economical solutions for their instrumentation needs.



COUNT/RATE MEASUREMENT

Need local count values? Try our full line of high speed, rugged counters, rate monitors and sensors. They are perfect for discrete parts production counting, or measuring motor RPM or conveyor speed. Easy to program, easy to use, and EASY TO SEE!!



PLC INTERFACES

PLC's are great, but how does an operator interact with the PLC? Our MMI series of text interfaces and graphical touchscreens connect to nearly all PLC's and easily let the user view the process and change setup information. We also offer simple BCD to LED displays and BCD thumbwheel and rotary input switches.



HMI SOFTWARE AND COMMUNICATION

Infilink-HMI is a full featured operator interface package, is an OPC client, and includes trending and datalogging. The development package is free. And a free OPC Server is included which connects using nearly any communication protocol over RS232, RS485, Ethernet, or other hardware layers.



Flow & Level Measurement



BATTERY & LOOP POWERED FIELD INDICATORS

BAT R/T-M & SQUIRT

BAT R/T-M displays 4.5 digits of rate and 8 digits of total simultaneously. The BAT R/T-M accepts signals from any pulse based sensor. With the analog output option, the BAT R/T-M uses the 4-20 mA loop power as its power source. An optional 20 point linearization feature is available for many turbine and PD flow sensors.

SQUIRT also displays 4.5 digits of rate and 8 digits of total. The Squirt handles linear and square root 4-20mA signals. It can be panel mounted or mounted in a NEMA4 (IP65) or an explosion proof enclosure.



PROCESS INDICATORS

INT69PM2, 529K & SQUIRT-R

Intellect-69PM2 is a process monitor with two relay outputs. It accepts analog signal inputs of 0-20mA, 4-20mA, 0-5V, 0-10V or 1-5V signals.

529K is a miniature process indicator with a 5 digit LED display. It accepts analog inputs of: 0/4-20 mA or 0/2-10 VDC.

SQUIRT-R is a 4.5 digit, loop powered indicator capable of accepting either linear or square root 4-20 mA inputs. Squirt-R so easy to program that you will feel comfortable programming it without the use of a manual.



SIGNAL CONDITIONERS

SC Series, AMP-2 & SHPFI

SC-FI is a two wire frequency to analog conditioner; pulse input, 4-20mA output.

SC-II is a loop powered isolator; 4-20mA input, isolated 4-20mA output.

SC-IF converts a 4-20mA input signal into a 0-10kHz output frequency.

SC-FF pulse isolator and scaler; pulse input, pulse output

AMP-2 is a dual preamp & signal conditioner for magnetic pickups

SHPFI is a smart frequency to current loop powered flow transmitter with scaled pulse output

FLOW COMPUTERS & LEVEL CONTROLLER

SUPERtrol I, SUPERtrol I LE, SUPERtrol II, LEVELtrol II & ES-747

SUPERtrol I provides rate & total and/or two-stage batch control via its multiple relay outputs, and can compensate for liquid density changes. It accepts analog or digital flow inputs, provides retransmitted analog & pulse outputs, and displays rate and total, or any number of other process parameters. An RS-232 port is standard.

SUPERtrol ILE is a light edition of the SUPERtrol I that offers basic unit functions at a reduced price.

SUPERtrol II provides temperature and pressure compensation calculations for heat, gas, steam, and liquid measurement. It accepts analog or pulse flow inputs and analog compensating inputs for pressure and temperature. Standard outputs include: two isolated 4-20mA outputs, isolated pulse & dual relay outputs and RS-232.

All SUPERtrol's can be ordered with advanced communication features such as: RS-232, RS-485 with Modbus RTU protocol, modem, wireless communication and two way paging support.

LEVELtrol II is a liquid level and tank quantity indicator, controller and can perform batch control by level. It supports tank level, tank volume, tank mass, temperature and density calculations.

ES-747 is a flow computer for pulse producing flowmeters used in liquid and gas applications. Multiple flow equations and instrument functions are available in a single unit with many advanced features.



BATCH CONTROLLERS

BATCHtrol II, MINI-BATCHER, SUPERtrol ILE & MS-716

BATCHtrol II is an 8 digit batcher and 6 digit ratemeter. It accepts pulse or analog signals

MINI-BATCHER is an economical 6 digit batcher and 4.5 digit ratemeter with LED display.

SUPERtrol ILE is an advanced batch controller and flow totalizer/ratemeter.

MS-716 is a flow totalizer, ratemeter and batcher for vehicle & skid mounting



RATE / TOTAL INDICATORS

MINIrol & INTELLECT-69

MINIrol is a pulse input rate & total indicator. It also provides two inputs that can perform "A-B", "A+B" functions or A & B can be viewed as separate counters. Two relays are provided for control of rate or total.

INTELLECT-69 is an analog input rate & total indicator. It can show rate, total, peak and valley and can accept current or voltage inputs from linear or square root flow sensors. Two relays and an analog output are available for control of rate or total.



Count, Rate, Process Measurement



LOW COST COUNTERS

KE610, E660/E760 & K0 Series

KE610: This super low cost counter is used in video games, vending machines, and slot machines to count the number of times a game has been played. This is the largest selling counter in this industry. It is tamper proof, comes in many voltages, and has a count life of 1,000,000 counts. All standard mounting styles are available.

E660/E760: This is our miniature, low cost counter. It is ideal for the same applications as above but where space is limited. Choose from several standard mounting styles and 6 (E660) or 7 (E760) digits.

K0 Series: The K0 Series are tiny 4, 5 or 7 digit totalizers. They provide a high degree of counting accuracy at a very low power consumption (250mW STD.; 30mW OPT.).



HOUR METERS

H57 & HC77

The **H57** UL/CSA approved elapsed timer is low cost, displays 7 digits of hours, tenths, and hundredths, and is available in AC or DC power voltages. It is perfect for warranty and run time measurement on OEM machines, and fits into the same panel cutout as most popular hour meters on the market. Also DIN rail mountable. The **HC77** offers all of the features of the H57 with the addition of a 7 digit event counter.

HB26 (6 digit) & HK17 (7 digit)

These hour meters are the perfect timer when low cost, small size and high quality are important. They are available in AC or DC voltages with manual reset (HB series). Highly visible white on black hour digits including red on black decimal digits.



LED DISPLAY COUNT/RATE/TIME

520K Series

MODEL	DESCRIPTION
520K	Simple Display Counter
521K	Totalizer & Position Indicator
522K	Frequency Meter & Tachometer
523K	Time Meter
524K	Multipurpose Device (521K - 523K in one unit)
525K	Adding Counter & Tachometer
526K	Two Display Counters
527K	Display Counter & Time Meter
528K	Two Time Meters
529K	Analog Display (0-20mA, 4-20mA, 0-10V or 2-10V)
530K	Analog Rate/Total (0/4-20mA, 0-10V or 2-10V)

LCD COUNTERS, TIMERS & RATEMETER

130K Series

These LCD indicators are self powered with an internal, 8 year, lithium battery and offers a NEMA4 (IP65) front panel. They can accept several input types and voltage ranges. The series offers: 8 digit counters (130K-133K), 7 digit timers (134K-135K) and an 8 digit ratemeter (136K).

KAL-D06 & KAL-DTIME

The KAL-D06 counter and KAL-DTIME timer are small, 10 year lithium battery powered displays that are panel mounted. They are designed as replacements for standard electro-mechanical counters and timers. They use the latest custom CMOS technology and incorporate an 8 digit, 0.354" (9mm) high, LCD display.



LCD AND LED PRESET COUNTER, TIMER & FREQUENCY METER

The 903K/904K, 924K and CTF16/CTF17 series are LCD and LED preset counters, timers or frequency meters. The following features are programmable:

- operating mode, polarity of inputs, input mode, multiplying factor, decimal point.
- output signals to be permanent or timed
- automatic reset
- gate time when programmed as a frequency meter
- timer resolution (s, min, h or h:min:s)



TEMPERATURE AND DIGITAL PANEL METER

TP550 Series

The TP550 series is a process controller for thermocouples, resistance thermometers and sensors with mV output. They feature two relay outputs and a bright LED display showing -19.999..99.999. The series also includes a programmable operating curve (24 points) for standard signals, thermocouples, resistance thermometers, etc.

APM Series

The APM series LCD digital panel meters replaces analog meters. The custom curved 40 segment display is as quick and easy to read as any analog instrument, with the added precision of a digital display. Available in a wide range of voltage and current inputs.



INPUT SENSORS Encoders, Proximity & Photo Sensors

KEP offers a wide range of input sensors for all of your application needs. Several styles of shaft encoders are available as well as inductive proximity sensors, photo sensors and magnetic switches. These sensors are the perfect compliment to any of our line of counters, timers, ratemeters or controllers.



PLC Interfaces



MICRO MESSAGE CENTERS **MMI-10, MMI-40, MMI-100, MMI-110 & MMI-140**

The MMI-1XX Series are a powerful yet cost effective PLC interface solution where space requirements are critical and cost is important. They communicate directly with the PLC through the programming port so that I/O can be used for what it is intended. The MMI-1XX provides a serial output port to support a printer or additional slave device.

The MMI-110 and MMI-140 offer data entry capabilities. The UP & DOWN arrow keys are used to scroll through linked lists of messages.



REGISTER ACCESS & MESSAGE PANELS **MMI-220 & MMI-240**

The **MMI-220** is a simple, easy to use, cost effective PLC interface. It communicates with the PLC directly through the programming port. Many advanced features are offered such as: programmable function keys, numeric data entry, messaging capabilities, keypad LED's, internal beeper & open collector alarm output. The MMI-220 offers a 2 line by 20 character display.

The **MMI-240** features all of the functions as the MMI-220 with the addition of a 4 line by 20 character display. Both units can be ordered with a backlit LCD or VFD display.



GRAPHIC TOUCHSCREEN PANELS **MMI-8000 Series**

The new MMI8000 Series have an improved design that comes very close to mimicking an Industrial PC. The 32-bit RISC kernel delivers impressive performance at low power. A hardware graphics acceleration engine gives superior 65K color graphics performance.

They have features for Data logging and Compact Flash Card or USB Stick type memory storage. Data information can also be accessed by SCADA/HMI software running on remote PC's via Ethernet. MMI to MMI communications are easily done through Ethernet.

FLAT PANEL MONITORS

FPM Series

The FPM series displays are designed with a slim chassis with rugged packaging. These LCD flat panel touch-screen monitors are available in many various sizes from 6.4" to 20". The FPM series not only free up valuable bench top or floor space, they also enhance the company's image with their leaner and cleaner high tech look. We specialize in customized displays for OEMs. The FPM series offers advanced features including; video camera inputs, bezel-less designs, high brightness (up to 1700 nits), and sunlight viewable displays.



BCD TO 7 SEGMENT DISPLAY

The S12 display is designed to be a window for programmable controllers. Working with any 12 to 24 VDC PLC output card, it accepts full parallel or strobed data from the controller register and displays temperature, setpoint, time, speed or other data within the programmable controller to keep operators aware of important parameters.



BCD THUMBWHEEL & ROTARY SWITCHES

TWTB:

The TWTB Series is sealed internally to protect against dust, dirt, and moisture. The TWSTB thumbwheel switch is sealed against dust and dirt only. Each digit is 0.500" wide and is sized for comfortable operation while saving space. They accept voltages up to 120 VAC. They are also available with diode isolation for use with multiplexing. Screw mounting hardware and screw terminal block connections are standard.

RSW:

These BCD rotary switches are used for inputting numerical data to counters and timers in PLC's. Suitable for all industries including food and pharmaceuticals.



SMART INTERFACE CABLES FOR KEIP OPERATOR INTERFACES

The SMIC cable is designed for connecting MMI-1xx and MMI-2xx series interfaces to a PLC. The MMI8000 Series do not require a SMIC cable. The SMIC cable is designed to communicate as a one to one device. Networking is not supported with standard SMIC cables. If networking is needed for more than one Operator Interface, consult factory for special cable requirements.



HMI Software and Communication



COMMUNICATION AND PRINTING ACCESSORIES

KEP offers many accessories for communicating and printing. We offer these accessories to simplify the communication and printing connections for the many KEP products that offer RS-232/422/485 communication options. Our accessories includes: printers, intelligent ethernet port servers, RS-422/485 to RS-232 interface converters and many more.

The ADAM-4572 serves as an interface between Modbus RTU serial devices and computer hosts running Modbus/TCP on an Ethernet network. Fully compliant with Modbus/TCP.



MODBUS COMMUNICATION

Several KEP products can be ordered with a Modbus RTU communication option. When the units are equipped with the Modbus communication option, the protocol it uses is the Modbus RTU protocol. This protocol defines a message structure that hosts and clients will recognize and use on the network over which they communicate. The KEP products offering the Modbus option include: MINItrol, DRT, MINIbatcher, SUPERtrol-I, Supertrol-ILE and SUPERtrol-II.



TROLLINK REMOTE METERING SOFTWARE

TROLLink retrieves data from KEP flow computers using direct wire, modem connection and ethernet gateway. It runs on: Windows 95® and higher; Windows NT® 4.0 and higher and works with most Hayes compatible modems for remote data collection. TROLLink can be set to automatically collect data from 1 to 100's of instruments and the collected data can go to screen, text files and Excel spread sheets. TROLLink collects data from the following KEP flow computer instruments: SUPERtrol I, SUPERtrol ILE, SUPERtrol II, LEVELtrol II, MS-716 and ES-747. A light version called TROLLink Jr is also available.

INFILINK-HMI AUTOMATION SOFTWARE

The full 32 bit version of Infilink-HMI is a full featured HMI solution at an affordable price. It is ideal for the small PLC user with its easy setup and run time price half that of competitive products. Machine builders and users want the benefits of a Windows based package, but are held back by the premium prices demanded by many vendors. Infilink-HMI changes all of that with the truly affordable HMI, Infilink-HMI.

- Bitmap (pictures) handling in HMI windows changed to support BMP, JPG, GIF, PNG, TIFF picture formats. Previously all the bitmaps were saved in BMP format, now saving in any of the above formats is possible. Bitmap files (picture files) duplication is now avoided. Both of these enhancements lead to reducing the size of "Bitmaps" subdirectory of the project directory.
- Run mode editing of strings contained in ComboBox and ListBox objects is now possible.
- Save / Load of strings contained in ComboBox and ListBox objects in run mode now possible.
- Help system upgraded to HTML Help. Now works with Windows Vista.
- DifToCSV and AlfToCSV utilities included
- Web Licensing: License your Infilink-HMI software yourself through our website, or over the telephone with one of our support engineers
- Improved Licensing Options: Upgrade a license (add tags, add remote users) without uninstalling/reinstalling the product
- PLC Driver Included: KEP bundles KEPServerEX and any one PLC driver with the INFILINK-HMI runtime license
- New InstallShield: Install Infilink-HMI directly over the web without downloading, unzipping, etc. Repair your installation or Add components directly--no need to uninstall then install again.
- OPC Client Functionality
- E-mail and Web Enabled: Send e-mail and view tag data over the Internet
- Historical and Alarm data logging to MS Access (MDB) files
- Free Design Mode: Only pay to unlock run-mode copies
- Historical Trending, Alarming, Data Logging included in base price
- Email and Web Enabling included in base price
- No yearly "maintenance" or "support" fees
- Built In Scheduler
- OPC, DDE and NetDDE Support

Free Development System

Infilink HMI provides a Free Development System, so you don't need to make a large investment to get started. You can download a free copy of Infilink HMI and the Manual directly from our web site at: www.kep.com.

Web Enabled

Use the internet and our iViewer utility to view tag data. This is an especially powerful troubleshooting feature when combined with email going to an alphanumeric pager. Infilink can notify technical personnel of a problem via email, and give them the ability to obtain additional application information over the internet.

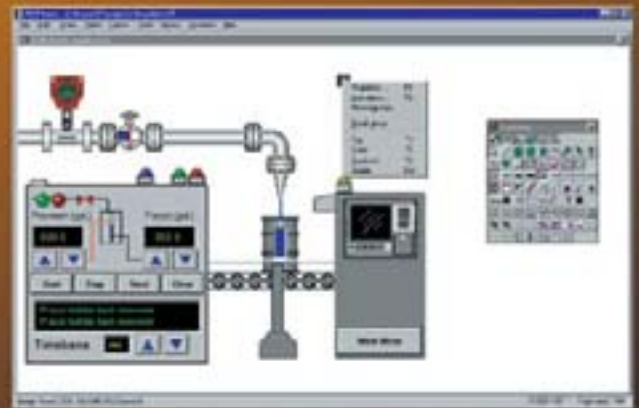
Scheduler

Infilink-HMI now includes a built in scheduler. Events can take place or tag data can be changed based on time, date, day of week, or holiday. New events can be entered by the operator in Run mode through the calendar interface.

Email Capable

Infilink-HMI can send email messages based on alarm conditions. This can be a regular email message, or it could be sent to a technician's alphanumeric pager.

FREE Intuitive Development System



2000+ Professionally Drawn Library Objects



Create Professional Looking Screens Quickly



Network Ready



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Call our literature department (X380) to order our FREE CD containing all three of our product catalogs!

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flow@kep.com (Flow Products information)
plc@kep.com (PLC Interfaces information)

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All KEP Marine products are sold exclusively through our KEP Marine Dealers.

Sunlight Readable, Pilot House & Glass Bridge Displays



HDI PRO Multimedia System



FishGLOW LED LIGHTING



underwater boat lights

KEP ivms MARINE In-Sight Vessel Monitoring System



BRIDGEVIEW Monitor Management Interface



LEVIATHAN Navigation & Multimedia Computer System



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