RULERS

- Stainless steel
- Graduated in inches and mm
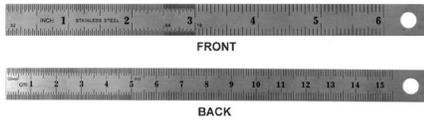
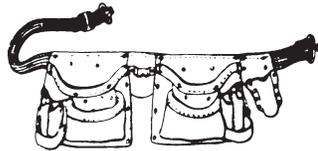| Part No.		1-9	10+
0604300	6" With Pocket Clip	$1.35	$1.20
0604769	12" Ruler S.A.E. / MM	1.95	1.75
0604T12	12" Rigid W/1/8", 1/16" 1/32", 1/64" Markings	6.96	5.95

VACUUM PEN HANDLING TOOL
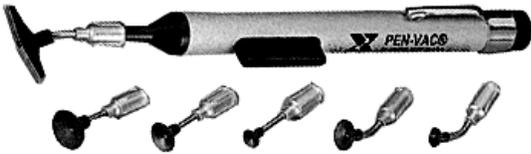
- Picks up 500g or less components
- Aluminum body that is ESD Safe
- Kit includes 6 tips and suction cups

Part No. 0603V8920 • Price $41.95

10 POCKET TOOL BELT

4 nail bags and 6 tool pockets for screwdrivers, pliers, etc. Plus 2 hammer holders, T-square pouch and steel holder. Riveted and heavy duty sewn construction. Polypropylene belt.

Part No.	1-9	10+
0612TB114	$22.95	$18.95

SHOP APRON WITH POCKET

Heavy duty denim bib apron with single pocket. 38" long with neck loop and waist ties.

| Part No.	1-9	10+
0612TB106	$11.95	$10.95

"Jorgensen" "C" CLAMPS

Regular-duty design with drop-forged carbon steel frames for general purpose industrial service.

Part No.	Open Max	Depth of Throat	Dia. of Screw	Test-Load lbs.	Price
0601SCL402	2"	2"	1/2"	3,300	$19.75
0601SCL404	4"	2 3/4"	3/4"	4,100	27.95
0601SCL406	6"	3 5/8"	3/4"	5,400	37.50
0601SCL408	8"	4 1/2"	3/4"	5,900	49.20

6" UTILITY DIAL CALIPER

- Steel construction caliper
- 6" dial
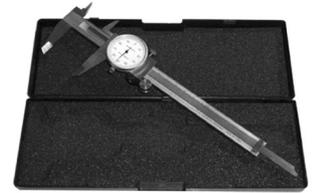
Part No. 0604DC780 • Price: $17.95

DIGITAL CALIPER

DELUXE MODEL
6" OR 8"

- Inches / mm switchable
- Stainless steel construction
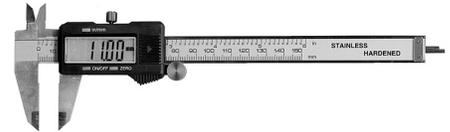
Part No.	Description	Length	Price
0604CAL8	Regular Display	8"	26.95
0604CAL6	Regular Display	6"	17.95

UTILITY MICROMETER

- Economical measuring device for beginners and hobbyists.
- Accuracy guaranteed to 0.001".
- Hex wrench is included for simple zero adjustments.
- Range 0 to 1".

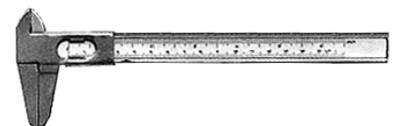| Part No.	Description	Price
0604MM775	Metric (0–25mm)	$19.95
0604SA775	SAE (0-1")	$9.00

DIGITAL MICROMETER
0–1" RANGE

- Provides accurate, quick measurements
- 6 digit LCD readout
- Graduation .0001"
- mm/inch conversion button

Part No. 0604DGMRT • Price: $75.95

ECONOMY VERNIER CALIPER

Part No.	Description	1-9	10+
0604VC166	Plastic Frame – 6"	1.95	1.45

PROXXON DISC SANDER

Features:
• Powerful, vibration-free running due
  to a powerful and balanced DC motor.
  Housing made of fiber glass reinforced
  POLYAMID.
• The sturdy die-cast aluminum machined worktable.
• The worktable can Tilt 50° inwards and 10° outwards (a scale facilitates accurate adjustment). for accurate angle sanding, also has a slot in the table for the adjustable mitre guide.
• Graduated mitre guide (0-90º) for angle cuts.
• Two additional square silicon sheets ensure that used discs can be stored and reused as necessary.
• Includes: Two 80 Grit Sanding Discs, Two 150 Grit Sanding Discs and Two 240 Grit Sanding Discs.
• Integrated suction device for connecting to a vacuum.

Part No.	Description	Price
90PX37060	Disc Sander	$241.95
90PX28160	Replacement Adhesive 5 Discs; 80 Grit	11.50
90PX28162	Replacement Adhesive 5 Discs; 150 Grit	11.50
90PX28164	Replacement Adhesive 5 Discs; 240 Grit	11.50

STANLEY SCRATCH AWL #7

Scratch Awl, Shank
Size 3 1/8 Inch, Wood Handle
With Two Flat Sides

Part No. 060269-122 • Price $4.45

JORGENSEN® VICE GRIP
6" Long Nose

The 92001 Locking Pliers are made from alloy steel for strength and durability. These pliers are adjusted easily with a slight turn of the screw adjustment. The jaws to grip at any angle and induction hardened for durability. The guarded release lever reduces the chances of accidental release.

Part No. 060411306 • Price $5.75

JORGENSEN® "C" CLAMP
4" Adjustable

Part No. 060ADJ1440 • Price $6.95

JORGENSEN® QUICK GRIP CLAMP
6" Jaw
ISD3 clamps feature a unique expandable design; which allows two clamps to be combined into one single clamp. This provides the user to add an additional 6" of clamping length to their bar clamps when combined by using a quick release knob for easy changes to the expanded or reversible position. These clamps also offer a 76 increase in clamping pressure over the 500QC QuickGrip series clamps. The ISD3 still feature the Dual Durometer handles and are truly a Woodworking Capable clamp.

Part No. 0601J33406 • Price $15.25

JORGENSEN® BAR CLAMP   *18" Jaw*

The Jorgensen Style ISD-3 Bar clamps are one of the most popular additions to the clamping line. The increase in clamping force make them a truly woodworking capable clamp.

Part No. 0601J33418 • Price $18.20

PROXXON POWER CARVER

Features:
• The main housing is made of
  glassfiber-reinforced polyamide
  and features a gearbox casing made of die-cast
  aluminium for precise locations of the ball bearings and stability under load.
• The tool is very safe, as the reciprocating action does not start until the chisel is pressed into the wood.
• Cleanly carving with no dust and virtually no effort.
• The rapid cutting action of the MOS (10,000 cuts per minute) allows the ability to do fine work like adding details as well as roughing out.
• On/off switch located at the upper back of unit
• The tool is exceptionally quiet, yet very powerful due to the permanent magnet maintenance-free motor.
• Accepts a variety of Flexcut® reciprocating chisels
• Three high-grade Japanese razor sharp bimetal chisels included: one flat chisel, one fingertip ('U' shape) chisel and one V-parting chisel.

Part No. 90PX38644 • Price $185.00

PROXXON SCROLL SAW

Features:
• Machined and perfectly plane aluminum work table allows sliding the work piece easily.
• Sturdy ABS plastic housing.
• Side door to conveniently remove saw dust.
• Graduated mitre guide (0-90º) for angle cuts.
• Adjustable longitudinal fence for straight cuts.
• Practical tool storage compartment (Key for saw blade exchange)
• Separate on/off switch and speed control dial for perfect speed every time.
• Very stable ribbed die-cast aluminum saw frame.
• Blade guide equipped with integrated blower.
• Patented head-part is height adjustable in three position and offer numerous advantages (See illustrations below)
• 4 Scroll saw blades are supplied (2 x 28 TPI & 2 x 17 TPI). Uses standard 5'' scroll saw blades.
• Integrated suction device for connecting to a vacuum.

Part No. 90PX37088 • Price $185.00

COMPRESSORS / DRILL PRESSES / SANDERS / SAWS

SKIL DRILL PRESS BENCH 10"

MODEL SK-3320

- 3.2 Amp, 3050 rpm.
- Laser x 2: 2 beam laser system.
- 8-1/2" x 9-7/8" tilting table.
- Adjustable depth stop.
- Bump off switch.
- Weighs 57 lbs.

Part No. 29DPSK3320 • Price: $160.00

DEWALT TABLE SAW COMPACT

MODEL DW745

Compact job site table saw; 15A; 3850 rpm speed 10" blade; $5/8$" arbor size; $3 \frac{1}{8}$" depth of cut at 90°; 16" maximum rip to right of blade; 12" maximum rip to left of blade; tool wt. 64 lbs.

Part No. 29DW745 • Price: $429.00

DEWALT MITER SAW
10" COMPOUND MITER SAW

MODEL DW713

- 15 amp, 5000 rpm motor delivers extended power
- Machined base fence support
- Cam miter lock for quick and accurate miter table positioning
- 0–50° left and right miter capacity
- **Arbor size:** $5/8$"; **Wt:** 35 lbs.
- **Vertical Capacity:** Baseboard against fence – $3 \frac{1}{2}$"
- **Vertical Capacity:** Crown molding laying flat – $4 \frac{1}{2}$"
- **90° Cross-Cut Capacity**: 4" x 4"
- **45° Bevel Cut Capacity:** 2" x 6"

Part No. 29DW713 • Price: $275.00

BLACK&DECKER PALM SANDER

MODEL QS900

- Powerful 2.0 Amp motor designed for best in class performance
- Built in dust collection for a cleaner work area
- New ConveXGRIP design with full body soft grips provide optimal comfort & control while sanding

Part No. 29BDQS900 • Price: $37.95

DEWALT WET / DRY VACUUM
CORDLESS, PORTABLE
MODEL DC515K

- 18V cordless
- $1/2$ gallon
- 2.5 ft. hose
- 1 hour charge
- One 18V battery
- Wt. 6 lbs

Part No. 29DC515K • Price: $152.00

PORTER✦CABLE COMPRESSORS

MODEL C2002 – COMPRESSOR ALONE
MODEL C2002WK – COMPRESSOR W/ACCESSORY KIT
MODEL CFBN125B – COMPRESSOR W/BRAD NAILER KIT

CFBN125B – Compressor w/Brad Nailer

Compressor (C2002)

- Oil-free pump for no maintenance
- 150 PSI pressure, 6 gallon pancake-style tank
- Low amp 120V motor starts easily
- Shipping Wt. 39 lbs.

Compressor with Accessory Kit (C2002WK)

- Same as **C2002** with addition of 13 piece kit
- **Accessory Kit:** 25 x $1/4$" PVC air hose with coupler and plug assembled, tire chuck with plug assembled, blow gun with plug assembled, OSHA safety nozzle and four inflater adapters.

Compressor with Brad Nailer ($1 \frac{1}{4}$") Kit (BN125A)

- Same as **C2002** with addition of Brad Nailer
- **Brad Nailer:** Model BN125A uses standard 18Ga brads from $5/8$" to $1 \frac{1}{4}$" long
- Special hardened drive blade allows for Maximum durability and reliability

Part No.	Description	Price
29PCC2002	Compressor Only	$235.00
29PCC2002WK	Compressor w/Accessory Kit	245.00

DEWALT JIG SAW COMPACT

MODEL DW317K

Compact jig saw kit, 0–3,100 strokes/minute, 1" stroke length, keyless blade clamp, 4 position orbital action.

Part No. 29DW317K • Price: $135.00

DEWALT JIG SAW CORDLESS
MODEL DC330K

18V cordless jig saw kit with keyless blade change. Includes jig saw blade.
- **Voltage:** 18V
- **Strokes/min.:** 0-3,000rpm
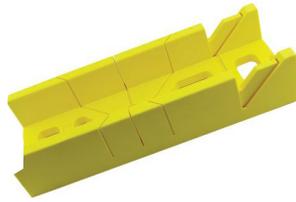- Dust blower
- **Charger/Batteries:** 1 hr/ (1) 18V XRP™

Part No. 29DWDC330K • Price: $330.00

PLASTIC MITER BOX

Features:
• 16"
• 45 deg. face cut and 45 & 90 deg. fixed angle cuts
• 3/8" front lip
• 16" long x 4" wide x 2-1/4" high
• Measure guide on side
• Hi-visibility yellow plastic
• Bulk

Part No. 90NGPMB16 • Price $5.25

NICHOLSON 8" MILL FILE

Features:
• Bastard Cut
• Used for sharpening mill or circular saws
• Single cut on side and edges
• 2 square edges, taper slightly in width

Part No. 060421832 • Price $7.75

NICHOLSON FILE HANDLE

Features:
• Interchangeable cushin inserts to fit most popular files
• Rubber-coated for better comfort and control
• Rear taper, wide middle, and flared neck increases push force

Part No. 060421474H • Price $4.90

DELTA
DRILL PRESS VISE

This drill press vise is designed for the home work-shop. The 4" opening capacity will allow the user to clamp a wide range of products for safe drilling. This vise has slots along each side for easy of mounting to any drill press. The jaws and 4" wide and have a throat depth of 1/2".

Part No. 0601DEL20621 • Price: $20.95

JORGENSEN BAR CLAMP *12" Jaw*

The Jorgensen Style ISD-3 Bar clamps are one of the most popular additions to the clamping line. The increase in clamping force make them a truly woodworking capable clamp.

Part No. 0601J33412 • Price $17.85

JORGENSEN PONY® BAND CLAMP

Ideal for irregular and awkward shaped clamping projects the Pony Style 1200 15 ft. Band Clamp features a band that holds odd-shaped work-pieces. This clamp also has a rust-proof steel frame. This clamp comes with a 1 in. x 15 ft. nylon band with a 1,000 lb proof test, 4 corners and 1 plated steel wrench.

Part No. 0601P1215 • Price $10.80

STANLEY RUBBER MALLET

Features:
• Rubber head helps minimize marring and surface damage
• Hickory handle, 13 1/2" length

Part No.	Description	Price
060451104	16oz Mallet	$5.50
06045T522	18oz Mallet	11.20

Pony SPRING CLAMPS

These Micro/Mini Plastic Spring Clamps are ideal for hobbyist, crafts or any light-duty project that requires instant opening and closing and where fast, easy application to or removal from the work is required.

#3271 #3272 #3273 #3274
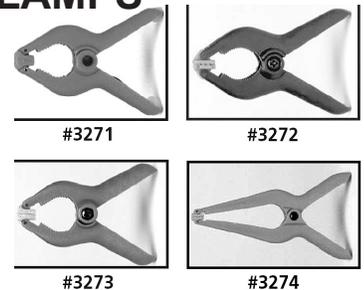
Part No.	Description	Price
0601SC3271	Micro Spring – Jar of 50	$19.30
0601SC3272	Mini Spring – Jar of 50	27.35
0601SC3273	Mini Wide-Jaw – Jar of 35	22.45
0601SC3274	Long Nose – Jar of 40	26.55

PUNCHDOWN TOOL

- Impact type (24PDT4)
- Adjustable impact pressure
- Suitable for 66 and 110 terminal blocks

110 Blade   66 Blade
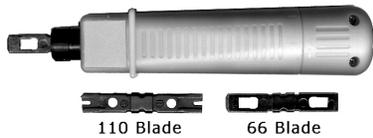
Part No.	Description	1-9	10+
24PDT4	Impact Tool	$25.95	$23.95
24PDT1	Non Impact Tool	9.50	7.50
24PDB-HT14	Blade for 66 Block	6.95	5.95
24PDB-HT14B	Blade for 110 Block	6.95	5.95

CRIMPING TOOLS FOR MODULAR PLUGS

- Cuts and strips
- Crimp RJ11/RJ12/RJ45
- Insulated grip

Part No.	Description	Price
24CTHT210	RJ45 (8P8C) Only	$10.95
24CTHT546	RJ11/12 (6P 6C) & Handset (4P 4C)	15.95
24CTHT599	RJ11/RJ12 (6P 6C) & RJ45 (8P 8C)	19.95
24CTHT568R	RJ11/12 (6P 6C) & RJ45 (8P 8C)/Ratchet	19.95

CRIMPING TOOL SET

- 8" modular crimping tool.
- Cuts, strips and crimps.
- Crimps RJ45, RJ12, RJ11, 6P6C offset, DEC plug, 4P4C, 4P2C.
- Includes 90 modular plugs: 40–4P4C plugs, 30–6P6C, 20–8P8C.
- Hard blow molded carrying case 8" x 10.5" x 2"; **Weight**: 2.1 lbs.

Part No.	Price
24CTS2000B	$89.90

CRIMPING TOOL SET

- 7" tool, frame made of steel, light weight, compact, durable and with ratchet mechanism.
- Crimps: RJ45 (8P), RJ12 (6P), RJ11.
- Includes universal wire stripper 0602HT501.
- Includes 60 modular plugs: 30–8P8C; 30–6P6C.
- Hard blow molded case.

Part No.	Price
24CTS2568AR	$44.95

REMOTE TELEPHONE & DATA LINE TESTER

For testing *remote* continuity of telephone and data lines using 4, 6 and 8 conductor plugs (RJ11 and RJ45). Can also test coax cables with BNC connectors. Tests up to 10,000 ft. 1 sec. test time 5 mA max. 9V battery included.

Part No. 34DT02 • Price: $65.00

UNIVERSAL CRIMPING TOOL
RATCHET TYPE

- Deluxe 9" tool of 3mm thickness
- Interchangeable die sets
- Crimps RJ-11, RJ-12, RJ-45 connectors
- Crimps BNC connectors using RG58, RG59, RG6 coax
- Crimps F-connectors using RG59, RG6 coax
- Crimps insulated and non-insulated terminals

| Part No.	Description	1-9	10+
24CTFRAME	Universal Tool W/O Dies	$19.95	$17.95
24CT6P	Die for RJ11 (4P, 2C; 4P, 4C; 6P, 4C; 6P, 6C)	8.90	8.25
24CT8P	Die for RJ45 (8P, 8C)	8.90	8.25
24CTHT301C	Die for BNC Connector Using RG58, RG59, RG6	8.90	8.25
24CT1328	Die for F Connector Using RG59, RG6	8.90	8.25
24CT336H	Die For Insulated Terminals 10 to 22 AWG	8.90	8.25
24CT236C	Die For Non-Insulated and Inter-Locking Terminals 10 to 20 AWG	8.90	8.25

UNIVERSAL STRIPPING TOOL – 4"

Strips outer insulation of flat and round multiconductor cable from 3.5mm – 9mm max. It can even handle irregular out-shape of insulation.
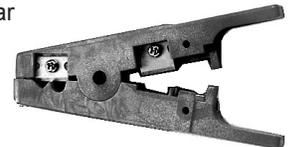
Part No.	Price
0602HT501	$8.75

COAX CABLE STRIPPER

- Strips the coaxial jacket and inner conductor in one operation
- 2 blade model
- Suitable for RG58/59/62/6
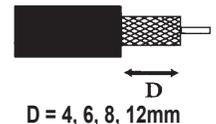
Part No.	Price
0602HT332	$10.50

D = 4, 6, 8, 12mm

LAN TESTER & CRIMP TOOL + PUNCH TOOL + RJ45 PLUGS (100)

This package includes crimping tool, cable/LAN tester, wire stripper, punch tool, and 100 pcs of RJ45 modular plugs

Part No. 32LNCTPRJ • Price: $19.95

8-DIGIT DUAL-POWER CALCULATOR

MODEL 216-8

- 8-digit hand-held
- Large LCD display
- Dual Power
- 3 Memory Keys
- Percentage
- Square Root
- Plus/Minus
- Auto Power off
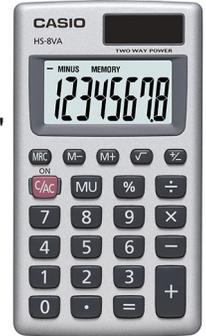- **Size:** 4.37 x 2.44 x 0.35 inches

Part No. 02TU216-8 · Price: $4.50

SCIENTIFIC CALCULATOR

10 DIGIT; 56 FUNCTIONS

MODEL SC107A

- 56 preprogrammed functions.
- Complex number calculations.
- Base-n calculations.
- Random number key.
- 3 regular modes.
- Comes with protective hard case.
- Auto power off.

Part No. 02TSC107A · Price: $8.75

SHARP
EL531 8 DIGIT/BATTERY

61 FUNCTIONS

Large 8-digit easy-to-read liquid crystal display. 46 pre-programmed scientific and statistical functions including trigonometric inverse trigonometric, logarithmic, and others. 3 angle modes (degree/radian/grad). exchange memory. 15 levels of parentheses with up to 4 pending operations. Independently accessible 4-key memory. Auto Power-Off. Large keys for comfortable operation. Memory Safe Guard Batteries included.

Part No. 02EL531 · Price: $10.50

3 MODE CALCULATOR

CLOCK, CALCULATOR, TELEPHONE DIRECTORY

MODEL MD164A

- Three functions (telephone directory, calculator and clock)
- Two line LCD with 10 letters for name and 12 digits for telephone number.
- Stores up to 50 names and telephone numbers.
- Searches data with one key.
- 8 digit calculator with hard cover.
- User selectable 12/24 hour system clock.
- Auto power off.

Part No. 02MD164A · Price: $11.95

CASIO® HS-8VA

8 DIGIT, BASIC

- 8-digit display (16-digit approximations)
- Large easy-to-read "Big Display"
- Constants for +, -, x, /
- Independent memory
- Mark-up Percent
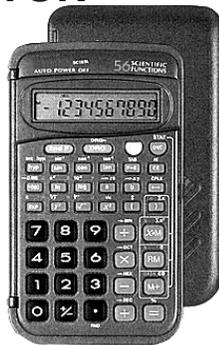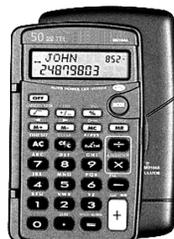- +/-, square root
- Solar Plus with battery backup

Part No. 02HS-8VA · Price: $3.90

CASIO® SL-450S

8 DIGIT, BASIC

- 8 digits LCD Display
- Solar Power
- Floating negative sign appears to the left of then number displayed
- Function signs in display
- Hard, plastic tamperproof keys
- Basic function: plus, percent, plus/minus, square root, memory keys
- Constants for +/-/x/÷
- Ability to clear last and/or all entries

Teacher's Pack comes with sleek storage case with 10 calculators, 1 workbook, 1-poster and instructional manual

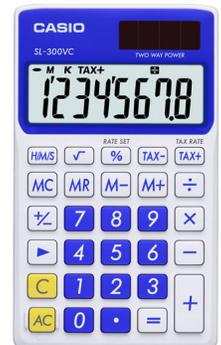| Part No.	Description	Price
02SL-450S	Calculator	$4.99
02SL450LNSITP	Teacher's Pak - 10pcs	49.90

CASIO® SL300VC

8 DIGIT, BASIC

Solar Plus Power, independent memory, and a profit-margin percent function make this calculator a perfect choice for business and home use.

- Time Calculation
- Tax Calculation
- 3-Digit Comma Markers

Part No. 02SL300VC · Price: $5.99

CASIO® FX-260 SOLAR

10+2 DIGITS / 144 FUNCTIONS

- Solar power type standard scientific model
- Standard deviation
- Permutation, Combination
- Comes with slide-on hard case
- New case with plastic keys

Part No. 02FX260 · Price: $9.95

CASIO® FX-115MSPLUS

TWO WAY POWER, 10 DIGIT

Scientific calculator with 2-line display. Expression and result can be displayed at the same time. Permitted for use on SAT and PSAT/NMSQT examinations. Two-way power feature. Statistical calculations with STAT-Data Editor. Solve calculation and formula memory (CALC). Complex calculations, equation calculations. Numerical differentiation and integration. Multi-replay function provides capability to backtrack step-by-step through calculations after you perform them. Edit expressions and recalculate. Slide-on hard case. Suggested courses: physics, statistics, trig, precalc, algebra I & II, pre-algrbra, geometry and general match.

Part No. 02FX-115 · Price: $18.25

CASIO®
FX-300 MSPLUS

8 DIGIT / 206 FUNCTIONS

True algebraic system, 18 levels of parentheses, 6 constant memories and 1 independent memory. Turbo high speed, auto power off. Includes protective hard case.

Part No. 02FX300S · Price: $10.55

CASIO® FX-300ESPLUS
SCIENTIFIC

Casio's latest standard scientific calculator features new natural textbook display and improved functionality. It is designed as a perfect choice for middle school through high school for students learning general math, trigonometry, statistics, algebra I & II, geometry, and physics.

Teacher's Pak comes with storage case, 10 calculators, 1 workbook, 1 poster, and an instruction manual.

Part No.	Description	Price
02FX-300ESPLUS	Calculator	$12.99
02FX-300ESPLUSTP	Teacher's Pak - 10pcs	129.90
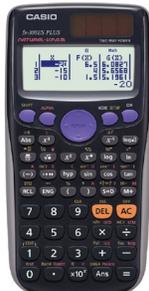
TEXAS INSTRUMENTS
TI-30XA SCIENTIFIC CALCULATOR

FOR GENERAL MATH AND SCIENCE

- Fractions and fraction/decimal conversions.
- Scientific functions include: trigs and hyperbolic trigs, logs and natural logs, roots and powers, reciprocals and factorials.
- One-variable statistics.
- Polar/rectangular conversions and degrees, minutes, seconds/decimal degrees conversions.
- Combinations and permutations.
- Manual and quick reference card included.
- 10-digit display with 2-digit exponent.

Part No. 02TI30X · Price: $12.90

SHARP
EL506 10 DIGIT/BATTERY

93 FUNCTIONS

93 preprogrammed scientific and statistical functions including 3-variable linear equations, logical operations, FSE (fixed decimal point, scientific and engineering notation, and display format exchange) and other. Complex number calculations. 15 levels of parentheses with up to 4 pending operations. Constant power, reciprocal and chain calculations. 3 key memories x 2. Decimal setting (TAB key). Auto Power Off. Memory Safe Guard. Batteries included.

Part No. 02EL506 · Price: $15.95
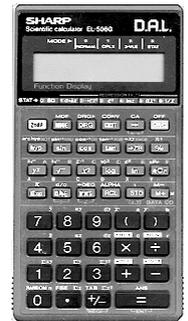
TEXAS INSTRUMENTS
TI-34 II SOLAR / BATTERY

10 DIGIT / 72 FUNCTIONS

Flexible neck display. Statistic capabilities include mean, standard deviation and sum of entered date. Bright color-coded keyboard featuring large easy-to use keys. Solar powered, 10 digit, 2 exponent display.

Part No. 02 TI-34Solar · Price: $19.95

CALCULATORS

TEXAS INSTRUMENTS
TI-30X IIS SOLAR SCIENTIFIC

10 DIGIT / 2-DIGIT EXPONENT LCD

- Algebraic Operating System
- Scientific, Trignometric, Statistical Functions
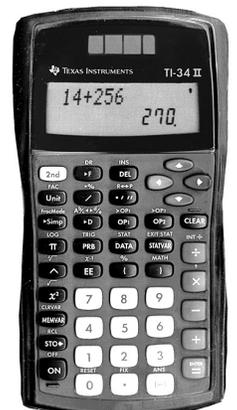- 3 Memories, Constant Memory
- Includes slide case, manual & reference card

Part No. 02TI30XSOLAR · Price: $15.75

(hp) 10S SCIENTIFIC CALCULATOR

- Do advanced calculations such as those involving statistics and conversions; solve inverse functions in algebra and trigonometry
- Find mean, standard deviation, variance, and more with the statistics editing capability
- Solve a wide range of problems with the four basic operations: +,-,*,/
- Calculate permutations, combinations, and factorials at the push of a button
- Simplify engineering applications with the decimal point selection.

Part No. 02HP10S · Price: $12.95

PROGRAMMABLE FOLDING SCIENTIFIC CALCULATOR

MODEL T185

- 10 + 2 digits 2-line LCD display
- 279 functions
- Multi-replay
- Fraction
- Differentiation and integration
- 2-Variable statistical calculations
- Base-n calculations
- Programmable with 360 bytes memory and up to four programs
- Folding case
- Auto power off
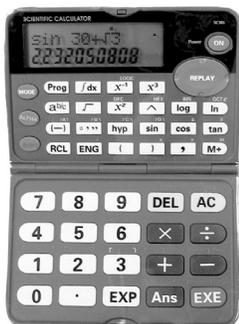
Part No. 02T185 · Price: $11.95

GRAPHING CALCULATOR

### 252 SCIENTIFIC FUNCTIONS

MODEL TG202

- Large 128 x 64 dots display (16-digits x 8 lines).
- **Advanced Graphing Power**: 20 built-in graphing functions, trace and zoom features, and parametric graphic function.
- **Fraction Calculations**: Conversions of fractions, mixed numbers and decimal numbers.
- **Programming Capability:** 10 user defined programs of 111 steps each.
- One and Two-variable statistics calculations.
- **4 Regression Analysis Modes:** Linear, logarithmic, exponential and power regressions.
- Trigonometry, Bin / Hex / Oct operations, logic operations
- **Power Source;** 2 x AAA batteries (Main), 1 x CR2032 (Back up).
- **Size:** 7.3" x 3.3" x 0.9"
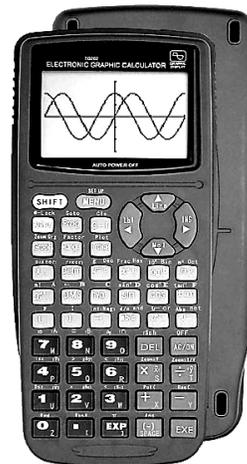
Part No. 02TG202 · Price: $64.95

TEXAS INSTRUMENTS TI-84 PLUS

- Electronically upgradeable graphing calculator allows you to have the most up-to-date functionality and software applications (Apps).
- 2.5 times the processor speed of the TI-83 Plus.
- 480 KB FLASH ROM memory for data archive and storage of Apps.
- 24KB of available RAM memory.
- USB port for computer connectivity, unit-to-unit communication with TI-84 Plus and TI-84 Plus Silver Edition graphing calculators, and more.
- I/O port for communication with other TI products.
- Internal Clock with date and time display.
- TI Connectivity Cable included.
- TI Connectivity Cable and TI Connect™ software allow information to be transferred to and from a computer and printed or stored on disk.
- Included Apps: Cabri® Jr., Vernier EasyData™, Conic Graphing, Inequality Graphing, LearningCheck™, Probability Simulations, Science Tools, StudyCards™, Topics in Algebra 1, Chapter 5, Topics in Algebra 1, Chapters 1-4, Transformation Graphing
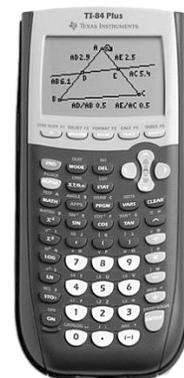
Part No. 02TI84PL · Price: $129.00

CASIO®
9750 GII

- REF/RREF Function
- Random Integers
- Unit Conversion
- New types of regressions
- Chi-squared GOF function
- 9 new probability functions
- Pie charts & Bar Graphs
- Graph X=f(Y)

Part No 02FX9750GII **· Price: $49.95**

CASIO®
FX-9860GII

GRAPHING CALCULATOR

Large, high contrast display with dual screen capability. Icon menu prodives easy access to advanced functions.
USB connectivity.
1.5MB flash memory, PC emulator
Random integers, Unit conversions
New types of regressions. Chi-squres.
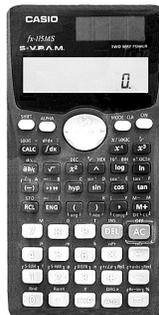GOF function. 9 Probability functions.
Pie charts, bar graphs, and more

Part No 02FX-9860GII ● Price: $79.99

CASIO® FX-115MSPLUS

TWO WAY POWER, 10 DIGIT

Scientific calculator with 2-line display. Expression and result can be displayed at the same time. Permitted for use on SAT and PSAT/NMSQT examinations. Two-way power feature. Statistical calculations with STAT-Data Editor. Solve calculation and formula memory (CALC). Complex calculations, equation calculations. Numerical differentiation and integration. Multi-replay function provides capability to backtrack step-by-step through calculations after you perform them. Edit expressions and recalculate. Slide-on hard case. Suggested courses: physics, statistics, trig, precalc, algebra I & II, pre-algrbra, geometry and general match.

Part No. 02FX-115 · Price: $19.25

TEXAS INSTRUMENTS
TI-83 GRAPHING CALCULATOR

EASY-TO-USE GRAPHING TOOL WITH ADVANCED STATISTICS AND FINANCE

- High contrast display.
- Many graph styles including normal, thick, dotted.
- Financial Functions: Includes Time-Value-of Money, uneven cash flows, and amortication
- Split screen allows you to trace the graph and scroll table values simultaneously
- Complex numbers: operations performed in rectangular or polar format.
- Includes keystroke programming commands for conditional tests, jumping, and loops.
- Assembly language programming capabilities.
- Four plot types including scatter, box-and-whisker, xy-line, histogram, and normal probability plots.
- Allows linking with TI-83s, TI-82s, CBLs™, CBRs™ and computers.
- Store and analyze up to 10 matrices
- Define, save, and graph up to 10 rectangular, 6 parametric, and 6 polar functions, in addition to 2 recursively-defined sequences.
- Advanced statistics: Includes hypothesis testing and confidence intervals. Store data in lists containing up to 999 elements per list.

Part No. 02TI83 · Price: $105.00

TEXAS INSTRUMENTS
TI-89 TITANIUM

Introducing TI's most powerful graphing calculator: The TI-89 Titanium, offering new features, preloaded Apps, and even more versatility. A built-in USB port makes data transfer ultra-convenient. Plus, with three times the memory of the TI-89, you can store more Apps, data, and programs.

The TI-89 Titanium's advanced functionality and 3-D graphing make problem-solving for AP*, advanced mathematics, and engineering courses infinitely easier. It's the most powerful TI graphing calculator allowed for use on the AP* Calculus, AP Statistics, AP Physics, AP Chemistry, PSAT/NMSQT**, SAT® I , SAT II, and Math IC & IIC exams.

- 16 preloaded Graphing Calculator Software Applications (Apps), including EE*Pro®, CellSheet™ & NoteFolio™
- 3x the Flash memory of the TI-89
- Built-in USB port with cable
- CD with operating manual
- All of the features & functionality of the TI-89
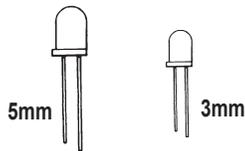- Preloaded with Official AP Calculus exam review questions

Part No. 02TI89 · Price: $154.00

BIPOLAR LED

- Color change on reverse voltage
- White diffuse lens

5mm   **3mm**

| Part No.	Description	Size	1-9	10+
08LHG3362	Red to Green	5mm	$0.25	$0.20
08LEG3362	Orange to Green	5mm	0.25	0.20
08L5017YGW	Yellow to Green	5mm	0.25	0.20
08L5017UEUGW	Bright Red to Bright Green	5mm	0.30	0.25
08L3017SGW	Red to Green	3mm	0.25	0.20
08L3017EGW	Orange to Green	3mm	0.25	0.20
08L3017YGW	Yellow to Green	3mm	0.25	0.20
08L3017UEUGW	Bright Red to Bright Green	3mm	0.30	0.25

DUAL COLOR LED

- White diffuse lens
- Two different colors depending on leads used
- 170° viewing angle.

5mm   **3mm**
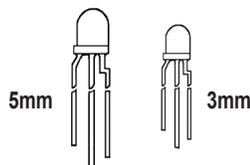
Part No.	Description	Size	1-9	10+
08LEG3392	Red/Green	5mm	$0.25	$0.20
08LYG3392	Yellow/Green	5mm	0.25	0.20
08L3015EGW	Red/Green	3mm	0.25	0.20
08L3015YGW	Yellow/Green	3mm	0.25	0.20

BIG DOME 20MM LEDS

←— 20mm —→
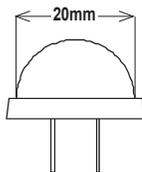
- 6-chip LEDs
- Choice of 5 colors
- Wide-angle illumination
- 4 pin DIP socket compatible
- Luminous intensity, 30–45 mcd

| Part No.	Emitted Color	1-9	10+
08C20ZUHR	Red	$0.80	$0.70
08C20ZYO	Amber	0.80	0.70
08C20ZUG	Green	0.90	0.80
08C20ZB	Blue	3.20	2.90
08C20ZW	White	3.50	3.20

LED TESTER

- LED Tester (pocket size) provides a quick way to check color, brightness and uniformity
- Provides 2, 5, 10, 20, 30, 50 mA drive current with a push of a button
- 7 middle positions set at 10mA allows comparison of several LEDs
- Requires 9V battery *(not included)*

Part No. 08LEDTST • Price:$7.95

MULTI COLOR LED

- 256 color capability with red, green and blue chips
- High intensity
- Water clear lense
- Reliable, rugged, long life
- Low power requirement
- **V$_F$ (forward voltage):**
  Red = 2V, Green = 3.5V, Blue = 3.5V
- **Luminous Intensity:**
  800 to 4000 mcd @ 20mA

0.232"

0.300"

Pin 1: Blue
Pin 2: Green
Pin 3: Common
Pin 4: Red

4 2 1
3
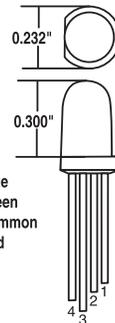
Part No.	Description	1-9	10+
08L5015RGBC	Common Anode (Pin3)	$0.95	$0.75
08LMC-C	Common Cathode (Pin 3)	$0.95	0.75
08LHHRBG	Common Cathode (Pin 3)	$0.95	0.75
	Pin 1: Green, Pin 2: Blue		

BLINKING LED – THREE COLORS

- Color change from red to green to blue
- T 1 $^3/_4$ – clear lense; light output 800 to 2400 mcd
- Ideal for alarm, projects and industrial applications

Part No.	1-9	10+
08LCHRGB	$1.95	$1.75

FLASHING LED– BLINKING LED

- 3.0/5.0/10.0mm round type LED lamps
- Standard to ultra brightness
- Various viewing angles
- Diffused and water clear lenses
- Popular T01 diameter package
- IC compatible / low current capability

3mm   **5mm**   **10mm**
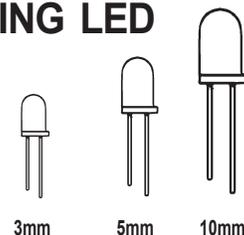
No current limiting resistors needed. Simply apply DC voltage. *(See datasheets at http://www.elexp.com/opt_6bid.htm for specific voltage requirements to make it blink.)*

Part No.	Color	Lense Color	Size	1-9	10+
08L36BID	Red	Red	3mm	$0.60	$0.50
08L36BGD	Green	Green	3mm	0.60	0.50
08L36BYD	Yellow	Yellow	3mm	0.60	0.50
08L56BID	Red	Red	5mm	0.70	0.55
08L56BGD	Green	Green	5mm	0.80	0.65
08L56BYD	Yellow	Yellow	5mm	0.80	0.70
08L56BBD	Blue	Blue	5mm	0.90	0.80
08L5013SRC-B	Ultra Red	Clear	5mm	0.75	0.60
08L5013UGC-B	Ultra Green	Clear	5mm	0.80	0.65
08L5013UYC-B	Ultra Yellow	Clear	5mm	0.80	0.65
08L5013UBC-B	Ultra Blue	Clear	5mm	0.90	0.80
08L96BIF	Red	Clear	10mm	0.80	0.65
08L96BGD	Green	Clear	10mm	0.85	0.70
08L96BYD	Yellow	Clear	10mm	0.85	0.70
08L96BBD	Blue	Clear	10mm	0.90	0.75

SUPER BRIGHT LEDS

BLUE / WHITE / GREEN / RED / YELLOW / ULTRA VIOLET

- Water clear lens
- **Typical Intensity:** 700 mcd to 5000 mcd @ 20mA
- **Color When Lit**: Red, Green, Yellow, Blue and White
- Viewing Angle: 30°

10mm dia. / 5mm dia. / 3mm dia.
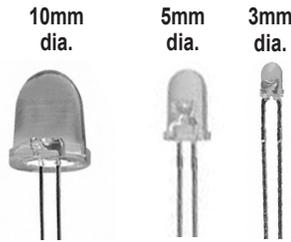
Part No.	Fig.	Color Emitted	A mcd	B 1-9	C 10+
08LCHR10	A	Red	2,000	$0.40	$0.30
08LCHG10	A	Green	2,000	0.75	0.70
08LCHY10	A	Yellow	1,600	0.40	0.30
08LCHB10	A	Blue	1,200	0.75	0.70
08LCHW10	A	White	4,000	1.10	1.00
08LCHR5	B	Red	5,000	0.25	0.20
08LCHG5	B	Green	4,000	0.50	0.40
08LCHY5	B	Yellow	2,500	0.25	0.20
08LCHE5	B	Amber	1,800	0.20	0.15
08LCHB5	B	Blue	1,500	0.40	0.35
08LVB3330D	B	Blue	200	0.55	0.50
(Diffused Lens)					
08LCHUV5	B	Ultra Violet	130	0.70	0.65

*USE PROPER EYE PROTECTION FOR UV LED

Part No.	Fig.	Color Emitted	A mcd	B 1-9	C 10+
08LCHW5	B	White	5,000	0.50	0.40
08LCHR3	C	Red	3,000	0.25	0.20
08LCHG3	C	Green	4,000	0.50	0.40
08LCHY3	C	Yellow	2,500	0.25	0.20
08LCHB3	C	Blue	1,500	0.45	0.35
08LCHW3	C	White	4,000	0.50	0.40

LEDS - CLEAR COLOR LENS

5mm / 3mm
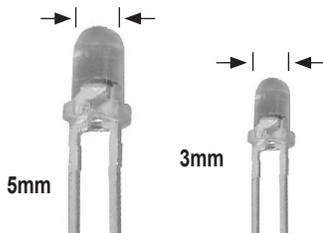
Part No.	Emitted Color	Lense Color	Size	1-9	10+
08L5012CHTS	Red	Red	5mm	$0.10	$0.07
08L5012CGTS	Green	Green	5mm	0.10	0.07
08L5012CYTS	Yellow	Yellow	5mm	0.12	0.09
08L5012CECS	Orange	Clear	5mm	0.12	0.09
08L3012CHTS	Red	Red	3mm	0.10	0.07
08L3012CGTS	Green	Green	3mm	0.10	0.07
08L3012CYTS	Yellow	Yellow	3mm	0.12	0.09
08L3012CETS	Orange	Orange	3mm	0.12	0.09

LEDS – DIFFUSED LENS

Fig. A / Fig. B / Fig. C / Fig. D / Fig. E / Fig. F
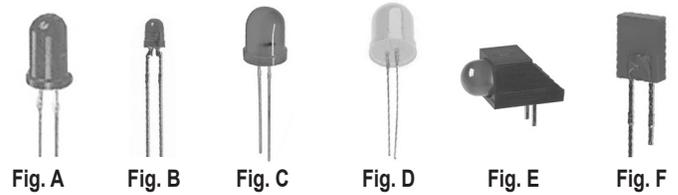
Part No.	Color	Fig.	1-9	10-99	100+
STANDARD – 5MM					
08L53RD	Red	A	$0.12	$0.08	$0.05
08L53HD	Bright Red	A	0.14	0.10	0.06
08L53GD	Green	A	0.14	0.10	0.07
08L53YD	Yellow	A	0.16	0.12	0.08
08L53ED	Amber	A	0.16	0.12	0.08
08L53WD	Red (Clr Lens)	A	0.12	0.08	0.05
08LVB3330D	Blue	A	0.55	0.50	0.45
SMALL – 3MM					
08L32RD	Red	B	$0.12	$0.08	$0.05
08L32GD	Green	B	0.14	0.10	0.07
08L32YD	Yellow	B	0.16	0.12	0.08
LARGE – 8MM					
08L803ID	Red	C	$0.27	$0.21	$0.16
08L803GD	Green	C	0.30	0.24	0.20
08L803YD	Yellow	C	0.34	0.28	0.23
JUMBO ROUND – 10MM					
08L3630HD	Red	D	$0.25	$0.20	$0.15
08L3630GD	Green	D	0.30	0.25	0.20
08L3630YD	Yellow	D	0.30	0.25	0.20
PC MOUNT					
08L72CB1IDA	Red	E	$0.30	$0.25	$0.20
08L72CB1GDA	Green	E	0.40	0.30	0.25
RECTANGULAR					
08L1043RD	Red	F	$0.15	$0.12	$0.08
08L1043GD	Green	F	0.17	0.14	0.10
08L1043YD	Yellow	F	0.22	0.19	0.15

LED KIT 300PCS

5 ASSORTED COLORS

Features:

- 3mm & 5mm clear LEDs
- 40pcs ea of white, red, blue, green, yellow 3mm clear LEDs
- 20pcs ea of white, red, blue, green, yellow 5mm clear LEDs

Part No.	Desciption	1-9	10+
3200LED300PK	300 LEDs in box	$11.95	$10.95

5V, 12V LEDS

HIGH VOLTAGE LEDS

No need to use current limiting resister. Hook up directly to +5V or +12V. Diffused lens, T 1 3/4 size. (5mm dia.)

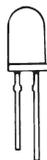| Part No.	Description	1-9	10+
08LI3330/HV5	5V, Red	$0.50	$0.45
08LG3330/HV5	5V, Green	0.50	0.45
08LY3330/HV5	5V, Yellow	0.50	0.45
08LI3330/HV12	12V, Red	0.50	0.45
08LG3330/HV12	12V, Green	0.50	0.45
08LY3330/HV12	12V, Yellow	0.50	0.45
08LB3330/HV12	12V, Blue	0.95	0.90
08LW3330/HV12	12V, White	0.95	0.90

ULTRA BRIGHT LEDS

Lense: Water clear, T1 3/4 (5mm).
Typical Intensity: 1000mcd to 3,000mcd.

Part No.	Luminous Intensity @20mA	Color Emitted	Viewing Angle	1-9	10+
08LHR3833	1300mcd	Red	12°	$0.20	$0.14
08LUR3333	2000mcd	Red	20°	0.30	0.26
08LUR3333/HO	1500mcd	Red	40°	0.30	0.26

INDICATOR LAMPS
W / LEADS

Lead length 6", various voltages; plastic colored lens caps (opt.).

Part No.	Descr.	1-9	10+
090GW2	2V	$0.45	$0.35
090GW6	6V	0.45	0.35
090GW12	12V	0.55	0.45
090GWCR	Red Cap	0.17	0.10

LED INDICATORS

Easy panel mount.

Part No.	Description	Hole Size	1-9	10+
08R735XR	T-1 3/4 LED, Red	.32"	$0.55	$0.50
08R735XG	T-1 3/4, LED, Green	.32"	0.60	0.55

LED TESTER

- LED Tester (pocket size) provides a quick way to check color, brightness and uniformity
- Provides 2, 5, 10, 20, 30, 50 mA drive current with a push of a button
- 7 middle positions set at 10mA allows comparison of several LEDs
- Requires 9V battery (not included)

**Part No. 08LEDTST • Price: $7.95**

LEDS SUPER BRIGHT

8MM

- Without flange
- Copper lead frame
- Water clear lense
- Viewing angle 55°

Part No.	Color	λp	Voltage Drop VF	Luminous Intensity mcd @ 100mA	1-9	10+
088R4D	Red	625	2.2V	8,500	$0.80	$0.65
088Y4D	Yellow	585	2.2V	9,500	0.80	0.65
088G4D	Green	530	3.4V	19,000	1.70	1.50
088B4D	Blue	468	3.4V	11,000	1.70	1.50
088W4D	White	–	3.4V	16,000	1.70	1.50

LEDS SUPER BRIGHT

- Super flux
- 7.6mm x 7.6mm size
- Water clear lense
- Viewing angle 120°
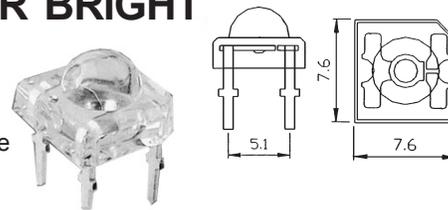
Part No.	Color	λp nm	Luminous Intensity @ 80mA mcd		Typ. Voltage Drop	1-9	10+
			Typ	Max.			
08L1860URC	Red	622	2200	3,500	2.2V	$0.40	$0.30
08ZXRF5	Red	622	4,000	6,000	2.2V	0.80	0.65
08ZXYF5	Yellow	590	4,000	6,000	2.2V	0.80	0.65
08ZXGF5	Green	528	9,000	10,000	3.3V	1.70	1.50
08ZXBF5	Blue	468	4,000	6,000	3.3V	1.70	1.50
08ZXWF5	White	–	7,000	8,000	3.3V	1.70	1.50

LED MOUNTING CLIPS

Ring/Clip set for 5mm dia. T 1 & 3/4 frame LEDS.

Part No.	1-9	10-99	100+
08AC200	$0.12	$0.07	$0.04

LED PROTOTYPING KIT

LED Designer Kit contains LEDs 5 each of all colors of 08L533, 08L32, 08L1043, 08L803, 08L93SRC, 08L56BID (red only). This includes super-bright LEDs and Blinking LEDs. Total of 75 LEDs.
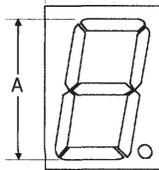
DELUXE KIT: All of the above kit plus: 5 ea. of all colors 5V and 12V LEDs, 2 ea. of all colors LED bar graph LEDs. Total of 105 pcs.

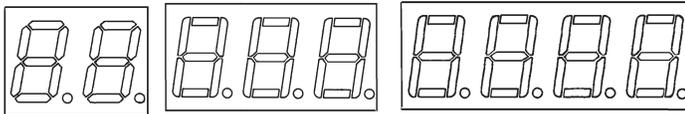| Part No.	Description	Price
3200LPK	Regular LED Kit	$12.95
3200LPKD	Deluxe LED Kit	19.00

JUMBO 2", 4", 5", 7"
7 SEGMENT DISPLAY

- Common anode
- Gray face with white segment
- Lights up red
- Total of 10 pins

Part No.	Description	1-9	10+
08LSD23265	2.3" Ht.	$4.50	$3.95
08LSD40165-20	4" Ht	9.50	8.95
08LSD50066-20	5" Ht	13.95	12.95
08LSD70011-20	7" Ht.	17.95	16.95

MULTI DIGIT DISPLAYS
7 SEGMENT / RED COLOR
0.56" SIZE

Part No.	Description	1-9	10+
08TIE525	C.C.; 2 Digit; 18 Pin	$0.95	$0.85
08TIE524	C.A.; 2 Digit; 18 Pin	0.90	0.80
08FYT5631B	C.A.; 3 Digit; 12 Pin	1.20	1.05
08FYT5631D	C.A.; 3 Digit; 28 Pin	1.20	1.05
08FYT5631I	C.C.; 3 Digit; 28 Pin	1.75	1.50
08FYT5641B	C.A.; 4 Digit; 12 Pin	1.95	1.70

LED BAR GRAPH

10 large easily defined segments.
Dual in line with 0.1" pin spacing.
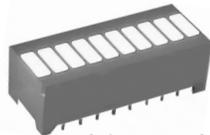
| Part No.	Color	1-9	10+
08DC10IDA	Red	$1.10	$0.90
08DC10HDA	Bright Red	1.20	1.10
08DC10GDA	Green	2.00	1.70
08DC10YDA	Yellow	2.00	1.50
08DC10ODA	Orange	1.50	1.25
08DC10MDA	Multi-Color 4-Red, 3-Yellow, 3-Green	2.20	1.70

LED ARRAY

- 10 Green LEDs
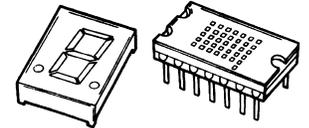- 20 Leads
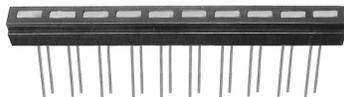
Part No. 08LA08B-10G • Price: $1.95

7 SEGMENT DISPLAY KIT

Display designer's kit includes 4 ea. CA and CC 0.3" 7 segment displays in red, green and yellow colors, 2 ea. of 0.5" red displays in CA and CC, 2 ea. of dual digit red CA and CC, 1 ea. of 0.8" red alphanumeric CA and CC display. Total of 34 displays.
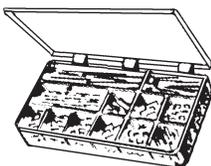
Part No. 3200DSSK • Price: $27.50

7 SEGMENT
LED DISPLAYS

Part No.	Description	Char. Height	Industry Equal	1-9	10+
08MAN72	C.A Red	0.3"	MAN 72	$0.75	$0.70
08MAN74	C.C Red	0.3"	MAN 74	0.75	070
08MAN82	C.A Yellow	0.3"	MAN 82	0.80	0.70
08MAN52	C.A Green	0.3"	MAN 52	0.80	0.70
08TIE412	C.A. Red	0.43"	5082-7750	0.80	0.70
08TIE413	C.C. Red	0.43"	5082-7760	0.80	0.70
08FND500	C.C Red	0.56"	MAN6780	0.95	0.85
08FND507	C.A Red	0.56"	MAN6760	0.95	0.85
08FNDGRAN	C.A. Green	0.5"	—	0.95	0.90
08FNDGRCC	C.C. Green	0.5"	—	0.95	0.90
08TIL305	Alpha Num.	0.3"	TIL305	9.95	9.50
08TIL311	4x7 Matrix w/logic Red	0.3"	TIL 311	16.50	14.00

BLUE 7 SEGMENT LED DISPLAYS
0.3" TO 2" HIGH

Part No.	Pin Out* Industry Equal	Char. Ht.	Descr.	Fig.	Price
08BL72	Man72 or TIL312	0.3"	C.A. Blue	A	$3.50
08B507	FND507	0.56"	C.A. Blue	A	3.50
08B524	TIE524	0.56"	C.A. Blue	B	6.50
08B23011	—	2.0"	C.A. Blue	A	16.95

Fig. A

Fig. B

- These are blue LEDs with same pinout as certain **_red_** popular industry equals

LED DISPLAY
ALPHANUMERIC
0.5" TO 1.5" HEIGHT
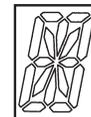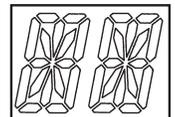
Fig. A   **Fig. B**

Part No.	Description	Fig.	Char. Ht	1-9	10+
08FY5013BD	Common Anode Red	A	0.5"	$1.45	$1.15
08FY8013BD	Common Anode Red	A	0.8"	1.95	1.65
08FY15012BD	Common Anode Red	A	1.5"	1.90	1.70
08FY8013AD	Common Cathode Red	A	0.8"	1.95	1.65
08FYD5421AS	Common Cathode, Red Dual Digit	B	0.5"	2.25	1.95

LITE ON
DUAL 7 SEG. DISPLAY
GREEN

- 0.4", CA Dual Display
- Mounted on spacer
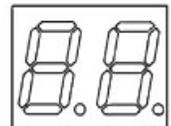
Part No.	1-9	10-99	100+
08LTD4608HG	$0.40	0.35	0.30

PHOTO CELLS / PHOTO CONDUCTIVE

- Quick response time / epoxy encapsulated
- High sensitivity / reliable performance
- Cadmium sulfide (cds) contruction
- Operating temp.: –30°C to +70°C
- Vmax = 100VDC
- Spectral peak: 550nm / Vmax = 150VDC

Part No.	Size Dim.A	Pmax (Min)	Light Resistance (10LUX)	Dark Resistance	1-9	10+
08GL5516	5mm	90	5K–10K	200K	$0.55	$0.45
08GL5539	5mm	150	30K–90K	5M	0.55	0.45
08GL7516	7mm	150	4K–10K	500K	0.75	0.65
08GL7539	7mm	150	50-100K	8M	0.75	0.65
08GL12528	12mm	200	8K–20K	2M	0.95	0.85

LED CLUSTERS

Part No.	Description	1-9	10+
08LCR525079	30 High Efficiency Green and 20 Super Bright Red LED's	$13.20	$11.75
08LCR2614B79	8 High Efficiency Green and 6 Super Bright Red LED's	3.95	3.65

LED CLUSTER OUTDOOR

- Each cluster has 16 segments.
- Each segment has 4 LEDs – 2 red and 2 green or 4 LEDs red (high intensity).
- Total of 64 LEDs in a cluster

● Red
○ Green

Figure A

● Red

Figure B

61 mm × 61 mm
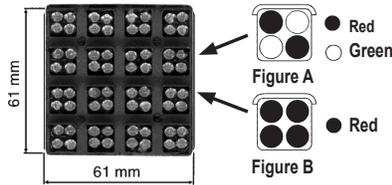
Part No.	Fig.	Description	1-9	10+
08F11X16AR2G2	A	2 Red, 2 Green Per Segment	$12.00	$11.00
08F11X16AR4	B	4 Red per Segment	12.00	11.00

LED MATRIX DISPLAY

5x7 Matrix. Available in various heights.
Lights up red.

Part No.	Ht.	Description	1-9	10+
08D35EW	2"	Anode Column, Cathode Row	$1.90	$1.70
08F12571AS	1.2"	Anode Column, Cathode Row	1.85	1.65
08F12571BS	1.2"	Cathode Column, Anode Row	1.85	1.60
08TA-12-11	1"	Anode Column, Cathode Row	1.85	1.60
08TC-12-11	1"	Cathode Column, Anode Row	1.85	1.60
08LTP747C	0.7"	Anode Column, Cathode Row	2.50	2.25
08LTP757G	0.7"	Cathode Column, Anode Row (Lights Green)	1.85	1.60

BIPOLAR LED MATRIX

8 X 8 DISPLAY

- Each LED can light up green or red
- Total of 64 LEDs in a single display
- Anode – column; cathode – row

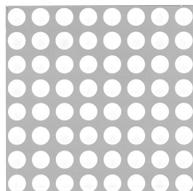| Part No.	1-9	10+
08FYM12882AEG	$4.95	$4.25

PHOTO-TRANSISTORS / DIODES

Fig. A   Fig. B   Fig. C   Fig. D   Fig. E   Fig. F   Fig. G   Fig. H

Part No.	Fig.	Description	1-9	10+
08LT1893	A	Photo Transistor	$0.70	$0.55
08OP501SW	A	Photo Transistor	0.40	0.30
08LPT3233	B	Photo Transistor	0.45	0.40
08OP500W	C	Photo Transistor	0.40	0.30
08LPD3330	A	Photo Diode	0.75	0.65
08MRD370	D	Photo Darlington/Motorola	2.95	2.50
08L14F1	D	Photo Darlington	2.95	2.50
08L14G1	D	Photo Transistor GE	3.75	3.50
08L14G2	D	Photo Transistor GE	3.75	3.50
08TIL413	E	Photo Diode	1.20	0.90
08MRD300	D	Photo Transistor/Motorola	3.75	3.50
08MRD500	H	Photo Diode Pin	4.95	4.50
08PT9087C	F	Phototransistor	0.35	0.30
08LPT80	F	Phototransistor	0.80	0.75
08OP560	F	Photo Darlington	1.95	1.50
08OP950	F	Photo Diode	1.60	1.40
08CLD71B	G	Solar Cell	2.10	1.95

INFRARED LEDS / EMITTERS

Fig. A   Fig. B   Fig. C   Fig. D   Fig. E   Fig. F

Part No.	Fig.	λp	Radiant Power (TYP)	Beam Angle	1-9	10+
08L5013IRAB	A	940	10mw	30°	$0.50	$0.40
08LT383L-313	B	940	2.0mw	15°	0.50	0.40
08LIR3231	C	940	2.0mw	15°	0.50	0.40
08MLED71	D	940	2.5mw	30°	1.45	1.35
08XC03	E	940	3.0mw	15°	0.70	0.60
08LED55C	F	940	5.4mw	10°	1.85	1.65
08FSD1	F	880	12mw	10°	2.15	1.95

INFRARED EMITTER / DETECTOR PAIR

Matched pair

Part No.	1-9	10+
08IRTR	$0.95	$0.85

Infrared Emitter   **Photo Transistor**
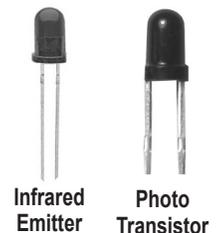
RSR-ᴧᴧ— LCD PANEL METER

3 1/2 DIGIT; 0.6"

Best Seller!

- Dual slope A/D conversion
- **Accuracy:** ±.5%
- **Sampling Time:** 2.5 sec.
- **Supply Voltage:** 8 – 12V DC
- **Size:** 68mm x 44mm
- **Input Impedance:** 100MΩ @ 200mv
  10MΩ @ 20mv
  10MΩ @ 200v

Part No.	Description	1-9	10+
01PMLCD1	0–200mv	$7.95	$7.50
01PMLCD3	0–200v	7.95	7.50
01PMLCD5	0–200V with Backlight	11.95	10.95

RSR-ᴧᴧ—
LED PANEL METERS

- Red LED display, 5VDC operation
- Large, 0.56 inch character height
- Adjustable decimal point
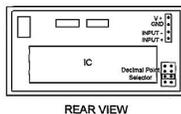- 100M input impedance, 2/5 sec sampling time
- **Dimensions:** 44mm H x 68mm W

REAR VIEW

Part No.	Description	1-9	10+
01DM3A	0-200mV	$10.95	$10.50
01DM3B	0-20V	10.95	10.50
01DM3C	0-200V	10.95	10.50

RSR-ᴧᴧ— LCD PANEL METERS

MODEL DV-101 – DC VOLTS
MODEL DA-103 – DC AMPS

Easy operation, professional quality, compact. Applications include education, industrial, QC and R&D, Lab.

Both Units Feature:
- LCD display, 18mm digit height
- 9V battery operation
- On/off switch
- Automatic zero adjust
- CATII 600V rating
- Approx. 0.4 sec. sampling
- Instruction Manual

Model DV101 DC Volts
- Range/Resolution:
  200mV x 0.1mV
  2V x 0.001V
  20V x 0.01V
  200V x 0.1V
- Accuracy: 200mv range
  ± (0.5% + 1 digit) reading
  2V, 20V, 200V ranges
  ±(0.8% + 1 digit) reading
- 10M input impedance

Model DA103 DC Amps
- Range/Resolution
  2mA x 0.001mA
  20mA x 0.01mA
  200mA x 0.1mA
  5A x 0.01A
- Accuracy: 2mA, 20mA, 200mA
  ranges ± (1% + 1 digit)
  reading
  5 amp range, (1.5% + 1 digit)
- Overload protection

Part No.	Description	1-9	10+
01DV101	DC Volt Meter	$42.50	$39.50
01DA103	DC Amp Meter	42.50	39.50

RSR-ᴧᴧ— LCD MODULES

- Character dot matrix
- Reflective; positive; gray
- Duty cycle 1/16; 5x7 dots
- Includes driver and controller
- **Models* with LED backlight: 08LCD7; 08LCD9; 08LCD12; 08LCD15; 08LCD18**

Part No.	Display Format	Module Size (mm)	Character Size (mm)	1-9	10+
08LCD6	16x1	80x36x9.5	6.56x3.07	$5.95	$4.50
08LCD7*	16x1	80x36x9.5	6.56x3.07	7.95	6.80
08LCD8	16x2	80x36x9.5	4.35x2.95	7.95	6.95
08LCD50**	16x2	80x36x9.5	4.35x2.95	8.50	7.50
08LCD9*	16x2	80x36x9.5	4.35x2.95	8.95	6.95
08LCD51***	16x2	80x36x9.5	4.35x2.95	9.50	7.95
08LCD11	20x2	116x37x9.5	5.55x3.2	9.95	8.50
08LCD12*	20x2	146x43x9.5	4.84x9.22	15.50	13.50
08LCD14	20x4	98x60x9.5	2.95x4.75	15.95	14.95
08LCD15*	20x4	98x60x9.5	2.95x4.75	19.95	17.50
08LCD17	40x2	182x33.5x11	3.20x8.20	15.95	13.95
08LCD18*	40x2	182x33.5x11	3.20x8.20	19.50	17.00

* Displays with LED backlight
**08LCD50 Comes with header pins
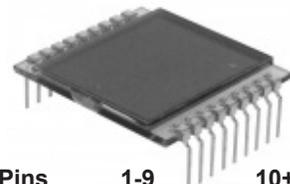***08LC51 Comes with LED backlight + header pins

LCD DISPLAY

- Parallel character 16 x 2
- STN positive, gray, reflective
- 8 bit or 4 bit parallel interface

Part No. 08LCD30 • Price $8.95

LCD DISPLAY

Digit Size: 0.5"; DIP 0.1" Type
Driver IC: CD4543 or ICL7106CPL
or 74C945

Part No.	No of Digits	No of Pins	1-9	10+
08LCD1	2	18	$3.95	$ 3.50
08LCD3	4	40	6.35	6.00
08LCD4	6	50	11.95	11.50
08LCD5	6	18 *(Multiplexed)*	7.90	7.50
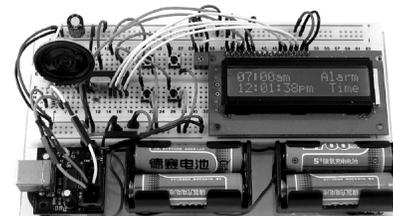
LCD TRAINER KIT

Liquid crystal displays are used in everything from mobile phones and TV's to robots. This trainer kit gives students hands on experience. A high quality instruction manual with step by step colour photos teaches students how to connect a common LCD to a processor and program it using free software from the internet. The basic kit comes with everything required for students to display messages, detect objects and build a working alarm clock.

Part No. 3200LCDTKIT • Price: $58.95

INDICATOR LAMPS – W / LEADS

Lead length 6", various voltages; plastic colored lens caps (*opt.*).

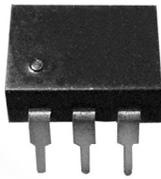| Part No.	Descr.	1-9	10+
090GW2	2V	$0.45	$0.35
090GW6	6V	0.45	0.35
090GW12	12V	0.55	0.45
090GWCR	Red Cap	0.17	0.10

OPTO COUPLERS

Part No.	Description	1-9	10+
08 4N25	Infrared diode to Photo-Transistor	$0.55	$0.40
08 4N26	Infrared diode to Photo-Transistor	0.50	0.40
08 4N27	Infrared diode to Photo-Transistor	0.70	0.60
08 4N28	Infrared diode to Photo-Transistor	0.50	0.40
08 4N29	Infrared diode to Photo-Darlington	0.70	0.60
08 4N33	Infrared diode to Photo-Darlington	0.85	0.75
08 4N35	Infrared diode to Photo-Transistor	0.70	0.60
08 H11A1	Infrared diode to Photo-Transistor	1.40	1.20
08 H11C2	Infrared diode to SCR output	0.70	0.60
08 H21A1	Interrupter Module	1.45	1.35
	Photo-transistor output		
08 H22A1	Interrupter Module	1.20	1.00
	Photo-transistor output		
08 MCT2	Infrared diode to Photo-Transistor	0.65	0.55
08 MOC3010	Infrared diode To Triac	0.80	0.70
08 MOC3011	Infrared diode to Triac	0.69	0.59
08 MOC3020	Infrared diode to Triac	0.69	0.59
08 MOC3021	Infrared diode to Triac	0.69	0.59
08 MOC3022	Infrared diode to Triac	0.69	0.59
08 MOC3030	Infrared diode to Zero Crossing Triac	1.85	1.65
08 MOC3031	Infrared diode to Zero Crossing Triac	2.25	2.05
08 MOC3032	Infrared diode to Zero Crossing Triac	1.85	1.75
08 MOC3042	Infrared diode to Zero Crossing Triac	1.85	1.75
08 PS2501-4	Infrared diode to Photo-Trans. (Quad)	1.90	1.75

OPTICAL ENCODER WHEEL

- Ideally suited to measure rotating shaft speed, acceleration
- Disk has 8 equally spaced holes
- Disk dia. 0.72" (18mm)
- Will accept shafts of .08" to 0.11" dia.

Will accept shafts of .08" to 0.11" dia.

Part No.	1-9	10+
08DISK	$1.10	$0.90

INCANDESCENT LAMPS

Fig. A Fig.C Fig. E Fig. G

Fig. B Fig.D Fig.F

Part No.	Description	Fig.	Volts	Amps	1-9	10+
090 49	Bayonet	A	2.0	.06	$0.45	$0.35
090 45	Bayonet	A	3.2	.35	0.35	0.30
090 47	Bayonet	A	6.3	.15	0.35	0.30
090 1488	Bayonet	A	14	.15	0.40	0.35
090 1815	Bayonet	A	14	.20	0.40	0.35
090 1829	Bayonet	A	28	.07	0.40	0.35
090 1891	Bayonet	A	14	.24	0.55	0.50
090 1892	Bayonet	A	14	.12	0.60	0.55
090 1893	Bayonet	A	14	.33	0.55	0.50
090 313	Bayonet	A	28	.17	0.40	0.35
090 2200	Wire Lead	B	5	.06	0.40	0.35
090 1730	Wire Lead	B	6.0	.03	0.40	0.35
090 2112	Wire Lead	B	6.3	.20	0.40	0.35
090 1869	Wire Lead	B	10	.014	0.55	0.45
090 2174	Wire Lead	B	12	.04	0.40	0.35
090 2182	Wire Lead	B	14	.18	0.40	0.35
090 7328	Bi-Pin	C	6	.20	1.00	0.90
090 7371	Bi-Pin	C	12	.04	1.00	0.90
090 7373	Bi-Pin	C	14.0	.10	1.00	0.90
090 7377	Bi-Pin	C	6.3	.075	1.00	0.90
090 7381	Bi-Pin	C	6.3	.20	1.00	0.90
090 7382	Bi-Pin	C	14	.08	1.00	0.90
090 7387	Bi-Pin	C	28	.04	1.00	0.90
090 342	Midget Screw	E	6	.04	0.55	0.50
090 86	Wedge Base	F	6	.20	0.45	0.40
090 53	Round Bayonet	-	14	.12	0.35	0.30
090 327	Midget Flanged	-	28	.04	0.50	0.45
090 656	Wedge Base	F	28	.06	0.40	0.35
090 6S6	Bayonet Large	-	120	.05	1.15	0.95
090 NE2	Neon Lamp	G	65AC	-	0.20	0.16
091 B	Bayonet Socket	D	-	-	0.50	0.40

FLASH TUBES

Figure A Figure B

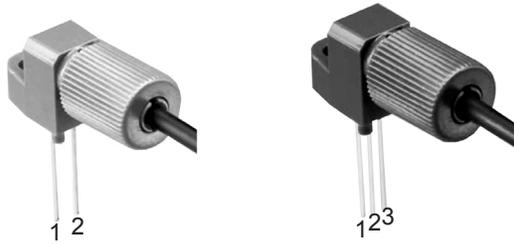| Part No	Fig.	Description	Price
09FT0	A	Anode Voltage 360 4KV Trigger Voltage 3,000 Life Flashes	$5.50
09FT1	B	Anode Voltage 300 6KV Trigger Voltage 10,000 Life Flashes	6.25
09FT4	B	Anode Voltage 300 4KV Trigger Voltage 1,000,000 Life Flashes	7.95

TRIGGER TRANSFORMERS

300V INPUT, 4KV OUTPUT

Fig.A

Fig. B

Part No	Figure	Price
16TRIG1	A	$3.75

FIBER OPTIC DEVICES

Connectors are already molded onto these devices.

Part No.	Description	1-9	10-99
08MFOD71	Pin Diode- Output	$3.25	$2.95
08MFOD72	Transistor Detector Output	3.50	2.95
08MFOD73	Darlington Detector Output	4.50	3.95
08IFD95	Photologic Detector Output	4.50	3.95
08MFOE71	LED – Infrared Emitter (lp = 940nm)	3.50	3.25
08IFE91D	Emitter Infrared – 100 Mbps (870nm)	3.50	3.20
08IFE92A	Emitter – Blue – (λp = 430 nm)	9.50	8.75
08IFE92B	Emitter – Blue – (λp = 470nm)	9.50	8.75
08IFE93	LED – Green LED Emitter	8.00	7.50
08IFE96	LED – Red LED Emitter (lp = 660nm)	3.50	3.20
08IFD96	Detector – 5MHz Photo Logic	6.50	6.25
08IFE97	Emitter – Super Bright LED – 1Mbps	4.50	4.00
08IFD97	Detector – 50 Mbps Photologic Detector	12.50	11.50
08IFE98	Emitter – Super Bright LED – 50Mbps	9.50	9.00
08IFD98	Detector – 155 Mbps Photologic	18.50	17.50

FIBER OPTIC CONNECTORS

Fig. A   **Fig. B**

| Part No.	Fig.	Industry Equal	Description	1-9	10+
2400228040-1	A	228040-1	Active Device Mount TO-92	$2.50	$2.25
2400228043-1	A	228043-1	Active Device "Sweet Spot" TO-92	2.50	2.25
2400228087-1	B	338087-1	Single Position Plug Assembly	2.50	2.25
2400228709-1	A	228709-1	Active Device Mount for Mot. Device	2.50	2.25

FIBER OPTIC CABLE

• Plastic μm core
• Typical attenuation .2db/meter (@650nm)

Part No.	Description	1-9	10+
2705FBS1M	Simplex Plastic 1 Meter	$0.75	$0.60
2705FBS10M	Simplex Plastic 10 Meter	6.25	5.50
2705FBS100M	Simplex plastic 100 Meter Spool	50.00	45.00
2705FBS500M	Simplex Plastic 500 Meter Spool	185.00	165.00
2705FIBOPT-D	Duplex Plastic Per Foot	0.80/ft	0.70/ft.

PHOTO CELL

Light dependent Resistor. Cadmium Sulfide type. Changes resistance with light.
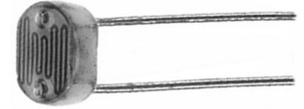
Part No.	Max. Dark Resistance	Resistance @ 2 ft. Candle	1-9	10+
08VT5K	500K ohm	5K ohm	0.75	0.65

PHOTO CELLS / PHOTO CONDUCTIVE

• Quick response time / epoxy encapsulated
• High sensitivity / reliable performance
• Cadmium sulfide (cds) contruction
• Operating temp.: –30°C to +70°C
• Vmax = 100VDC
• Spectral peak: 550nm / Vmax = 150VDC

Part No.	Size Dim.A	Pmax (Min)	Light Resistance (10LUX)	Dark Resistance	1-9	10+
08GL5516	5mm	90	5K–10K	200K	$0.55	$0.45
08GL5539	5mm	150	30K–90K	5M	0.55	0.45
08GL7516	7mm	150	4K–10K	500K	0.75	0.65
08GL7539	7mm	150	50-100K	8M	0.75	0.65
08GL12528	12mm	200	8K–20K	2M	0.95	0.85

# MOTION DETECTOR MODULES AND/OR IC'S WITH DATA SHEET

Low Voltage Operation with built in alarm mode. Detects changes in ambient light. Features ULN-2232 IC.

Part No.	Description	1-9	10-49	50+
08MODETECT	Modules (Includes IC and Optical Lens Mounted on PC Board W/Capacitors	$2.00	$1.70	$1.50
08ULN2232	IC and Optical Lens Only	1.00	.85	.75

OPTIONS:

Part No.	Description	Price
26SP08	Speaker For Motion Detector	$0.95
061137	Project Box and Lid	3.95
2800RG9	9V Battery	1.30
2801BSI	Battery Snap	.25
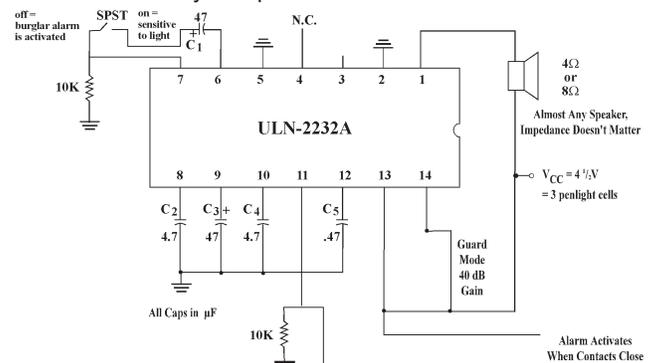
FIBER OPTIC SPLICING & CONNECTOR MODULE

The Fiber Optic Connector and Splicing Module is an ideal hands-on training curriculum for industrial technology and vocational education studies in two of the most sought after industry technical skills todaysplicing a fiber optic cable and doing field installations of fiber optic connectors.

Features
- Comprehensive and challenging activities
- Complete self-contained curriculum
- Color-coded activity tabs
- Low cost per student
- Uses safe, large-core plastic fiber
- Full 4-color instructor and student manuals
- Step by step instructions
- Many graphic illustrations add clarity to instructions
- Removable and photocopyable sheets in the Instructor's Manual
- Stand-alone curriculum capability

The Fiber Optic Connector and Splicing Module is a 3-activity module with the following activities:

- Equipment and Component Familiarization
- Methods for Installing a Fiber Connector
- Methods for Splicing Fiber Cable

Each activity includes:
- Advance reading assignments
- Actual hands-on, step-by-step procedures for assembling components, then testing them for degree of technical performance. Discussions of applicability to real-world environments such as communications systems put the procedures in industry perspective.
- Assessment of the strengths and shortcomings of various components as system requirements change.
- Worksheets/quizzes that test students' knowledge as well as their ability to apply that knowledge to conceptual situations.
- Homework assignments (using Internet or library resources)

The comprehensive Instructor's Manual that comes with the module also includes answers to quiz and worksheet questions and a description of replacement parts, which are consumed or worn down in activities.

(The Fiber Optic Connector and Splicing Module includes the following items: fiber inspection microscope, hot knife and stand, fiber optic crimping tool, Professional fiber cutter, titanium polishing puck, polishing slurry, Micro-strip fiber stripper, glass polishing plate, tool box, 2 ounces index-matching gel, 2000 grit sandpaper, 3 µm polishing film, 2 ST® mating sleeves, set of two interconnecting fibers, 4 ounces isopropyl alcohol, 2 Student manuals, 1 Instructor¹s manual, 15 2-meter lengths of 1000 µm-core plastic fiber, 15 fiber splices and 30 ST® fiber connectors.)

Part No.	Description	Price
08IF505	Complete Splicing & Connector Module Including All Components	$585.00
08IF528	Consumable Kit	195.00

FIBER OPTIC COMMUNICATIONS & NETWORKING MODULE

The Fiber Optic Communications & Networking Module is a 10-activity, intermediate-level product developed for teaching fiber optic communications and networking technology. The curriculum addresses the most recent advances in the rapidly changing fiber communications and networking technology fields.

Curriculum subjects include:

- Fundamentals of fiber optic technology
- Optical fiber manufacture
- Optical fiber construction: single- and multi-mode
- Dispersion and attenuation
- Fiber cable comparisons
- Generation III fiber connection technology
- Fusion splicing techniques
- Fiber couplers and optical power splitters
- Wavelength division multiplexing
- Fiber optic tools, testing and test equipment

The module curriculum guide is a comprehensive manual comprising 10 exciting activities, with technical reading assignments for each. Accompanying Fiber Optic Reference Guides contain 14 chapters with several hundred illustrations in 199 pages. An extensive list of references and a working glossary of fiber optic terms are included.

Hands-on experiments and networking activities include:

- Color picture and sound signals over fiber
- Optical fiber characterization
- Losses in optical fiber
- Fiber optic switching networks
- Optical and electrical multiplexing
- Fiber termination polishing and splicing
- Infrared light conversion
- Use of fiber optic couplers (splitters)

FEATURES
- Versatile curriculum format (metric and SAE dimensions)
- 10 comprehensive and challenging activities
- Full-color student and instructor manuals
- Completely self-contained curriculum
- Curriculum pretest and post test
- Instructor's manual with color-coded answer sheets
- Solid-state, low profile, surface-mount transceivers with audio and video transmission capabilities
- Low-voltage transceiver operation with optical detection
- Multiplexed switching input/output transceiver
- Low-power LED technology for safety
- 3 transmit wavelength operation

(The Communications and Networking Module shown above comes complete with three fiber optic wide-bandwidth video transceivers, 110 VAC- to-12 VDC power adapters*, 15 2-meter 1000 µm core plastic fibers, 15 fiber splices, 30 ST® fiber connectors, crimping tool for splices and connectors, 40 µm and 3 mm polishing film, optical inspection scope, index-matching gel, DC motor, optical multiplexer, fiber cutter, polishing plate, polishing slurry, ST® barrel connector, 1 x 2 fiber star coupler, 1, 3, and 10- meter fiber optic cables, fiber optic multi-meter, two dynamic microphones, two AM/FM radios, scale, infrared indicator card, coax cable, hot knife and stand, Micro-strip fiber stripper, four ounces isopropyl alcohol, photonics wall chart, two Fiber Optic Reference Guides, two permanently bound student manuals and an instructor's manual in a sturdy 3-ring binder.)

Part No.	Description	Price
08IF527	Fiber Optic Communications & Networking Module	$2,395.00
08IF120265	Student Manual	27.00
08IF120260	Teacher's Manual	38.00
08IF528	Consumables Kit – contains 15 two meter plastic fibers, 15 fiber splices, 30 ST® fiber connectors, 40µm and 3mm polishing film	195.00

RSR-⋀⋀— EXPERIMENTER'S KIT

Includes fiber optic components, cable, lab manual and experiments that can be breadboarded.

Part No. 3200OK100 • Price: $8.95

RSR-⋀⋀— COMMUNICATION KIT

Easy to assemble, digital link. This kit contains receiver and transmitter PC Boards. 555 based on board oscillator. Frequency range 100Hz to 10KHz. Includes fiber optic devices, cables and connectors.

Part No. 3200RSR721 • Price: $14.95

OPTICAL AUDIO LINK

Easy to assemble voice link. Transmitter and receiver on separate PC boards. Great for learning the basics of fiber optic communications. Includes fiber optic devices, cable and connector. Requires 2 – 9V batteries *(not included)*.
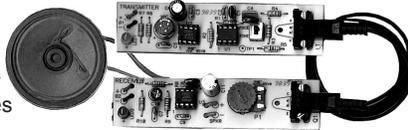
Part No. 3200OK726 • Price $13.90

SCIENCE PROJECT KIT

Learn fiber optics by experimenting and building projects with no prior experience needed. The practical 224-page text has theory, 8 experiments and 5 projects. After completion of this kit several useful projects will have been constructed, such as an analog voice link, and a light pen.

Part No. 3200FBIFE33 • Price: $46.00

FIBER OPTIC CLASSROOM AND LAB COURSE

This is a 10-to-15 week course put together to fill the needs of vocational schools and universities in fiber optics. Basic understanding of electronics and mathematics is suggested. Course includes a text for classroom or lecture, lab manual for student experiments, and lab kit with all required components.

Part No.	Prices
32FBSC11	$105.00

FIBER OPTIC MINI COURSE

This course is a package that can be integrated into any electronics class. Beginning with history through system design and applications. Covers industrial and communication applications. The "Instructor's Edition" contains an additional reference book, answer guide, overhead transparencies, 10 demo pieces and the regular curriculum.

Part No.	Description	Prices
32FBMC10	Fiber Optic Mini Course	$36.95

FIBER OPTIC CABLE

• Plastic µm core
• Typical attenuation .2db/meter (@650nm)

Part No.	Description	1-9	10+
2705FBS1M	Simplex Plastic 1 Meter	$0.75	$0.60
2705FBS10M	Simplex Plastic 10 Meter	6.25	5.50
2705FBS100M	Simplex plastic 100 Meter Spool	50.00	45.00
2705FBS500M	Simplex Plastic 500 Meter Spool	185.00	165.00
2705FIBOPT-D	Duplex Plastic Per Foot	0.80/ft	0.70/ft.

FIBER OPTIC LAB MANUAL AND LAB KIT

Features: 7 Experiments, Final Design Project, Glossary, Research Projects. Lab Manual is a complete 60 page technical manual, written in an easy to understand style. It contains 7 ready to use experiments – Making a Light Pipe; Fiber Cable Transmission; Splices; Connectors and Terminations; Speed of Opto-Electronic Devices; Fiber Optic Transmitters; Fiber Optic Receivers; Star Coupler; Final-Design Project.
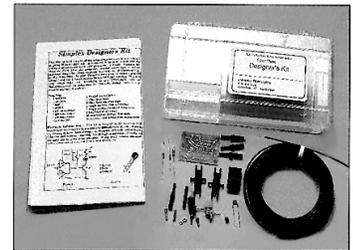
Part No.	Description	Prices
32FBLM	Lab Manual only	$14.90
32FBLMKIT	Lab Manual w/ Kit	43.95
32IFMLA	Answer Guide	7.95

DESIGNER KITS

MODEL IF-SD11 (SIMPLEX KIT)
MODEL IF-DD11 (DUPLEX KIT)

"Creative-friendly" kits for technicians, experimenters, scientists and enterprising students who require prototypes or special-purpose interfaces requiring fiber optics capabilities. This very low-cost "active link" requires a single +5 volt supply and interfaces with all TTL/CMOS logic. It includes 10 meters of 1000 µm optical cable; efficient dry, non-polish connectors, bulkhead interfaces, and splices; integrated detector(s) and emitter(s); and top-quality printed wiring boards. Full instructions and technical data sheets complete the package.

Part No.	Description	Price
3200FBSD11	Simplex Kit (Single Channel)	$66.00
3200FBDD11	Duplex Kit (Bi-directional)	125.00

FIBER OPTIC SPLICE KIT

A complete package for extending or mending the jacket 1000µm plastic fiber. Kit contains all retention clips, fiber sleeves, and assembly instructions to complete ten splices. No polishing, adhesives, or special tools required.

Part No. 06FBCS10 • Price: $9.25

FIBER OPTIC TOOL KIT

This kit includes all the tools needed to work with all plastic optical fibers and termination types:

- Jacketed and unjacketed, diameters ranging from .25 to 3 mm, single strands or multi-fiber bundles
- Polishing, simple cutting or hot knife terminations
- Connector-less or connectorized

Kit contains fiber optic stripper, hot knife, universal fiber cutter, water dispenser, rubber pad, 600 grit and 3 µm polishing film, replacement blades, ST fiber polishing puck, rugged storage container and instruction sheet.

Part No. 06FBIFTK4 • Price: $125.00

FIBER OPTIC DEMONSTRATION SYSTEM

The Fiber Optic Demonstration System is a state-of-the-art fiber optic technology module. This tried and proven academic module comes complete and ready to use. This curriculum recently has been revised and rewritten to include the latest in the rapidly changing fiber technology field. Additions to the curriculum include:

- Fusion splicing techniques
- Fiber connector technology
- Optical power splitters
- Wavelength division multiplexing
- Fiber termination tools and procedures
- Fiber optic testing and test equipment

The curriculum manual is precisely formatted into 10 independent activities in 144 pages with more than 60 real-owrld illustrations and industry photos. An extensive list of references and a working glossary of fiber optic terms is included. Each activity includes:

- Historical and technical reading assignments
- Hands-on working experience and experiments with fiber optics and associated components
- Problem solving and student worksheets
- Team activities
- Homework and investigative research
- Web fiber optic tours and projects

Hands-on activities immerse students in the technological aspects of:

- Voice transmission over fiber
- Analog and digital data transmission
- Morse Code over fiber optics
- Optical fiber characterization
- Fiber sensors and applications
- Bending losses in optical fibers
- Optical fiber termination and polishing
- Attenuation in optical fiber

Part No.	Description	Price
32IFDS100G	Demonstration System Glass Version	$850.00
32IFDS100C	Student Manual	29.00

OPTICAL VOICE LINK

MODEL IF-OVL-K (KIT)
MODEL IF-OVL-A (ASSEMBLED)

For students and experimenters alike, the Optical Voice Link is the ideal introduction for those first learning about the marvels, mysteries, and science of light transmission through optical fiber. There is something fascinating, indeed, about hearing your own voice, after it has been converted into light and then coupled into, through and out of an optical fiber.

The Optic Voice Link is designed to meet a wide variety of educational, commercial, and industrial applications, including:

- Science projects
- Home projects for hobbyists
- Short, audio fiber optic curriculums for schools
- Inexpensive classroom demonstrations
- Hands-on practical industrial training
- Voice transmission in critical electrical isolation applications

The Optical Voice Link can be extended up to 60 meters.
Kit includes: printed wiring boards, switches, electronics, microphone, 8 ohm speaker, three meters of plastic fiber cable, an uncomplicated tutorial, and step-by-step assembly instructions. No prior fiber optics experience, special tools or training are needed to build, use and enjoy the multiple applications of this kit. Some experience with soldering is recommended for completion of the unassembled version.

PART NO.	DESCRIPTION	PRICE
32IFOVLK	Kit	$49.95
32IFOVLA	Assembled	85.00

ADVENTURES IN FIBER OPTICS KIT

Introductory fiber optic technology kit. Contains 5 unique projects:
- Image Magnifier
- Lighted Constellation Map
- Fiber Optic Wand
- Fluorescent Holiday Wreath

Features 20 different experiments including:
- Bending a light guide
- Fluorescence
- Tyndall's Prestigious Experiment
- Special Fiber Optic Lighting
- Art of Polishing Glass
- Making Your Own Image Conduit.

Kit comes complete with penlight, rubber light hood, 6 different optical fiber types, Ulexite fiber optic rock, 3 coherent fiber optic components, color filters, lens, star/constellation map, polishing film and other miscellaneous components

Part No. 32IFE60 • Price: $36.00