CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

2. THERMIONIC AND FLAME IONIZATION DETECTORS FOR GC

For a COMPLETE DETECTION system, SELECT a TOWER type from section 2.1,2.2, 2.3,2.4,2.5,or2.6, a THERMIONIC SOURCE or FID PROBE from section 1.1 , and the appropriate electronics. ELECTRONIC REQUIREMENTS:THERMIONICSOURCES are powered by a DETECTOR CURRENT SUPPLY in section 2.7, 2.8,or2.9.The NP mode thermionic source (TID-2orTID-4 types) can also be powered by Agilent 6890 NPD electronics or Varian TSD electronics.Thermionic and flame ionization signals are measured with a NEGATIVE ION ELECTROMETER already existing on many GCs (e.g., Agilent 6890 NPD Electrometer or Varian TSD Electrometer),or by the DET ELECTROMETER in section 2.8,or 2.9. An independent Keithley Model 6485 Picoammeter can also be used for signal measurement.

2.1 TID/FID TOWER/JET ASSEMBLY Stainless steel/ceramic tower mounts onto existing FID or NPD base on GC for positioning thermionic source or FID probe in close proximity to ceramic lined jet. Select any thermionic source type or the FID probe from section1.1 for a complete detector hardware assembly. Available response modes:TID-1-N2, TID-1-02, TID-2-H2/Air (NPD), TID-3-N2, TID-3-02, TID-4-H2/Air {NPD)l, TID-5-H2/Air, CFID, HWCID, or FID.

FOR VARIAN 3400/3600/3800(010-860 -20)c ----------A$3600 each

FOR SRI 8610 with signal to DET Electrometer(050-863-98) b,c ----------A$3600 each

FOR SRI 8610 with signal to SRI Electrometer (050-864 -98) c $3600.each

2.2 REMOTE FID TOWER ASSEMBLY(040-862-XX)b,c ----------A$2775 each
FOR MOUNTING ON AGILENT 6890 FID BASE (XX=13) OR HP 5890 FID/NPD BASE(XX =12):

Stainless steel/ceramic tower mounts on to existing FID or NPD base on GC with thermionic source remotely positioned from flame jet. Select TID-1 source (FTID-1 mode without ion suppress capability,TID-1-N2,TID-1-02 model, orTID-2 source (FTID-2 mode,TID-2-H2/Air(NPD) model,TID-3 source(TID-3-N2,orTID-3-02model.TID-4-H2/Air(NPD), TID- 5-H2/Air or CFID source (Remote FID mode). Larger internal volume than the TID/FID tower.

2.3 PTID TOWER ASSEMBLY(060 -862-XX) b,c----------A$2775 each
FOR MOUNTING ON AGILENT 6890 FID BASE (XX =13) OR HP 5890 FID/NPD BASE (XX =12): Stainless steel/ceramic tower with thermionic source and ion collector remotely positioned from jet structure and with an internal restrictor to prevent flame flash back from hot thermionic source to the jet. Select TID-6 source for PTID mode, TID-2 or TID-4 source for NPD mode, or FID Probe for HWCID mode. Also TID-1 and TID-3 modes are available with this tower structure.

a uses existing FID jet, b requires DET electrometer, c supplied with DET jet, or Agilent wide bore jet

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

1.2 THERMIONIC/CATALYTIC SOURCES (1/4 INCH TUBE MOUNT) ----------A$440 each
Electrically heatable, ceramic coated thermionic/catalytic sources mounted into a 1/4 inch 00 stainless steel tube instead of the standard hexagonal flange mount specified in section 1.1. Sources are dimensioned such that the thermionic surface is positioned in the center of a flowing gas stream when the source structure is installed in a standard 1/4inch Swagetype tee fitting. Possible applications include customer designed GC detectors (e.g., Thermo Electron Trace GC, SRI 8610 GC); mass spectrometry ion . sources; activated surfaces for catalytic chemistry; or thermionic emitters for electrical discharge apparatus. Thermionic/catalytic sources terminate in a Twinex connector that is compatible with DET electronics specified in sections 2.7 thru 2.9. Sources are also available with Bare Wire terminations at A$380. each, and are indicated by specifying -01 instead of -00 in the last two digits of the part number. Descriptions of source types are the same as in 1.1.

a.)TID-2(110-902-00); b.)TID-4(1 10-904-00); c.)TID-1 (110-901-00); d.)TID-3(110-903-00);

e.) TID-5 (1 10-905-00); f.) TID-6 (110 -906-00); g.) CFID (120-901-00);

h.) FID Probe (120-90 2-00) -A$300. each with connector, A$250. each with bare wire termination.

1.3 RECYCLED THERMIONIC SOURCE----------A$380 each
Return used thermionic source. Machined parts and electrical connector are re-used; new wiring and coating are applied; and the source is pretested. Performance is comparable to a new source. (NOT available for source with bare wire terminations, nor for the FID Probe). Agilent 6890 NPDsources can be recycled to any DET type. When ordering recycled sources, use -RC in place of the -00 (last 2
digits) in the part numbers listed in 1.1 or 1.2.

1.4 THERMIONIC SOURCES FOR THE FINNIGAN/TREMETRICS 9001 NPD --------A$440 each
Thermionic sources mounted in a round flange that fits the 9001 NPD structure. Twinex connector is compatible with the Finnigan/Tremetrics electrical connections.
a.) TID-2 (010-902-49); b.) TID-4 (010-904-49).

RECYCLED SOURCES FOR THE 9001 GC ----------A$400.each

a.) TID-2 (010-902-49RC); b.) TID-4 (010 -904-49RC)

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

1. CERAMIC COATED THERMIONIC ION SOURCES (BEADS)

Durable 0 .062 inch diameter x 0 .40 inch long ceramic cylinder structures molded about an electrical wire core. Sources are constructed according to DET's exclusive multi-layer coating method with various additives intermixed into alumina ceramic matrices. Different additive formulations provide a family of source types having different work functions for the emission of electrical charge. Source coating types are also designed for operation in specific gas environments. All DET Ion Sources are pre-tested for response before shipment. Ceramic source structures are available in several different stainless steel mounting configurations. Source wiring normally terminates in a Twinex connector compatible with DET electronics specified in sections 2.7. 2.8. or 2.9; with Agilent Technologies 6890 NPD electronics; with Varian TSD electronics; and with Finnigan/Tremetrics 9001 NPD electronics. Sources are also available with Bare Wire terminations (Nickel ribbon that can be soldered or spot welded).

1.1 THERMIONIC SOURCES (STANDARD HEX. FLANGE MOUNT) ----------A$440 each
This hexagonal shaped mounting flange is the standard configuration that fits all DET detector/transducer structures as well as the Agilent Technologies 6890 NPD structure. Source part number sending in-00 indicate the standard Twinex connector. Sources with Bare Wire terminations are priced at A$385 each. and are indicated by specifying -01 instead of -00 in the last two digits of the part number.

a.) TID-2 (0 10-902-00) -Moderate work function Black Ceramic formulation for NPD operation in dilute H2/Air. Provides sharp P peaks. For applications requiring only P, or both N, P detection.

b.) TID-4 (010-904 -00) - Moderate work function White Ceramic for the NPD provides the best N detectivity. For applications requiring only N detection (P peaks tail more than TID-2).

c.) TID-1 (010-901-00) - Low work function for operation in N2, , Air. or 02. Selective for Nitro compounds. Oxygenates, Pyrrole groups, some Halogenates. high concentrations of CH_2 groups with an oxidizing detector environment.

d.) TID-3 (010-903-00) -Moderate work function for operation in N2, Air, or 02 Selective for volatile Halogenates.

e.) TID-5 (0 10-905-00) - High work function for operation in dilute H2/ Air. Provides selectivity for Br and I compounds versus other Halogenates.

f.) TID-6 (010-906-00)-High work function for operation in pre-mixed high flow of H2/Air. Used in PTID for selectivity and very high ionization efficiency for Phosphorus.

g.) CFID (020 -901-00)-High work function for operation downstream of a flame. Used in Remote FID for selectivity to Pb,Sn,.P.and Si,

h.) FID Probe (020-902-00) -Uncoated Pt alloy wire used for universal detection in FID and HWCID. A$300. each with connector, $165. each with bare wire termination.

WHEN ORDERING REPLACEMENT SOURCES. CONSIDER ALSO THE RECYCLED OPTION IN 1.3.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

2.7 DETECTOR CURRENT SUPPLY (001-901-XX)----------A$2610each
Provides 0-4.000 Amps heating current and -5, -15, -45 Volt bias voltages for thermionic sources. Includes grounded power cord, and SOURCE POWER CABLE (4 foot Twinex cable with Twinex connectors both ends.).

WHEN ORDERING SPECIFY INPUT VOLTAGE: XX=01 for 115 VAC,XX=02 for 230 VAC

2.8 COMBINED CURRENT SUPPLY/ELECTROMETER (001-902-XX) ----------$4500 each
Provides all electronics required to operate thermionic detectors independent of any instrument. Module includes detector current supply, (same as in section 2.7), and a NEGATIVE ION electrometer. The electrometer is a GC quality electrometer which provides an analog output siqnal, 0 to 1 Volt maximum, for display on conventional data systems/recorders. Includes INPUT SIGNAL CABLE (4 foot Coax cable with BNC connectors both ends), and OUTPUT SIGNAL CABLE (5 foot shielded twisted pair cable with 3/8 inch fork lugs both ends).

WHEN ORDERING SPECIFY INPUT VOLTAGE: XX=01 for 115 VAC, XX=02 for 230VAC

2.9 COMBINED CURRENT SUPPLY/ELECTROMETER/READOUT (001-903-XX) ---A$5585 each
Same as in section2.8 except includes a digital voltmeter in the combination electronics module to provide a LED display of the electrometer output signal.

WHEN ORDERING SPECIFY INPUT VOLTAGE: XX=01 for115VAC, XX=02 for230VAC

3. THERMIONIC TRANSDUCERS

Stainless steel/ceramic thermionic detection components contained in a structure capable of operating at 400℃ and suitable for attaching to standard gas line fittings. For a COMPLETE TRANSDUCER system, SELECT a TOWER type from section 3.1, 3.2, 3.3, 3.4 or 3.5, a THERMIONIC SOURCE or FID PROBE from section 1.1, and electronics from section 2.8, or 2.9.

3.1 TID TRANSDUCERTOWER/TUBE INLET (050-860-95) ----------A$1980.each
Includes installed pre-tested collector electrode/ceramic and collector probe arm terminating in a female BNC connector. Inlet is 1/4 inch 0D tube; outlet is 1/4 inch Swage fitting. Other inlet/outlet sizes available.

3.2 TID TRANSDUCER TOWER/SWAGE INLET (050-860-XX) ----------A$2310.each
Includes installed pre-tested collector electrode/ceramic and collector probe arm terminating in a female BNC connector. Outlet is 1/4 inch Swage fitting; inlet is a Swage fitting as follows:

3/8 inch Swage: XX =96
1/4 inch Swage: XX = 97
1/8 inch Swage: XX= 98

3.3 TID TRANSDUCER TOWER/SWAGE INLET/TOWER PURGE (050-862-XX) ----A$3300.each
Same as 3.2 except includes an additional 1/16 inch tubing tower purge gas inlet. Select Swage inlet option XX as in 3.2.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

3.4. FID TRANSDUCERTOWER/JET ASSEMBLY (050-861-97)----------A$327 each
Includes installed pre-tested collector electrode/ceramic, unpolarized ceramic-tipped jet, 1/16 inch Swage type gas port for O2 or air flow around periphery of jet, and collector probe arm terminating in a female BNC connector. Inlet is a 1/4 inch OD tube with a 1/8 inch OD X 1/16 inch ID ceramic liner that protrudes as a jet into the transducer body. It is presumed that H2 and sample gas streams are premixed prior to the inlet. This transducer normally uses an FID Probe from section 1.1, but other thermionic sources may be used as well.

3.5 TFID TRANSDUCER TOWER/JET/HEATER BLOCK (050-873-99) ----------A$4350 each
This is the transducer/heater subassembly used in TFID model 062DD described in section 6.
The transducer tower and 1/16 inch jet/tee inlet are mounted on an aluminum heater block equipped with stainless steel standoff mounting posts, a 75 Watt heater cartridge, and a type J thermocouple.
The sample inlet is a 1/16 inch Swage fitting, with a 1/16inch Swage tee fitting available for adding H_2 or other gases to the sample gas for flow through the 1/32 inch ID of a 1/16 inch OD ceramic jet. A 1/16 inch tubing gas line provides a second detector gas flow around the outer periphery of the jet. Select the FID Probe from section 1.1 for an FID, or other thermionic sources for other modes of operation.

3.6 MOUNTING FLANGE FOR TID TRANSDUCERS (010-002-10) -.: ----------A$150.each

1 ALUMINIUM HEATER BLOCK/STANDOFFS (050-828-00) ----------A$495 each
Attaches to TRANSDUCERS and MOUNTING FLANGE above. Includes stainlesssteel standoffs, 75Watt heater cartridge, and type J thermocouple. This is the heater block subassembly used in the RTIA and TFID modules.
2 DETECTOR REPLACEMENT PARTS

4.1 ION SOURCES -see section 1.

4.2 COLLECTOR ASSEMBLY(010 -803-00) ----------A$120 each
Stainless steel collector cylinder and ceramic insulator used in OET detector/transducer towers.

4.3 COLLECTOR PROBE ASSEMBLY(010-801-00)----------A$440 each
Signal probe comprised of a ceramic/stainlesssteel/hightemperature cable/BNC connector assembly that attaches to the side of detector/transducer towers via a 1/8 inch graphite ferrule/Swage fitting, and connects to the collector cylinder via a metal wire fork contact.

4.4 COLUMN SPACING KIT (010-885-13)----------A$150 each
Used in conjunction with a wide bore jet (Agilent #18789-80070) to set a close spacing of the column end and ion source tip for the Agilent 6890 NPO or for DET hardware that fits the Agilent 6890 FID base or HP 5890 FID/NPD base.

4.5 SHORT WIDE BOREJET(010 -419-13) ----------A$210.each
Standard 64mm long wide bore Agilent jet #18789-80070 cut to 48mm length to fit Agilent's dedicated "Capillary NPD" detector base weldment.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

REACTOR THERMIONIC IONIZATION ANALYSIS (RTIA) is a method of thermally evolving vapors from solid or liquid samples in an inert or oxidizing gas environment, followed by selective thermionic detection of the evolved vapors.
The basic RTIA equipment consists of a TID-1 type thermionic transducer preceded by a heated reactor chamber.
When an Air Sampling Pump such as 5.1 3 is connected at the transducer exit, ambient air provides the working gas environment,and the RTIA becomes a gas less chemical sensing system requiring only electrical power for operation. In this TID-1 -Air configuration, the RTIA is applicable to the detection of toxic gases such as Iodine-I2, N02, Cl2, etc., as well as headspace vapors such as phenols, carboxylic acids, nitro compounds, and some halogenates evolved from various liquid and solid samples.
Electronegative vapors trapped on absorbents can be thermally desorbed and detected by inserting the trapping tube into the RTIA reactor. Also, small quantities of real world solid samples such as food products, soils, coal, or fabrication materials can be inserted directly into the RTIA reactor such that characteristic thermal evolution patterns are established. The TID-1-Air mode is especially sensitive to nitrogen oxide and halogen/halogen oxide vapors. For fast response times to volatile halogen vapors such as methylene chloride, a TID-3 type source may be used instead of the TID-1. NPD detection can also be achieved by adding a low flow of Hydrogen through a tee at the reactor inlet, and using TID-2 or TID-4 sources.

STANDARD THERMIONIC SOURCE IS TID-1 TYPE.
For TID-3 source, specify the digit 3 instead of 0 in the first digit of the part number (eg.,3XX-XXX-XX). For NPD detection substitute a first digit of 1 for a TID-2 (N and/or P detection), or substitute a first digit of 5 for a TID-4 (best N detection). See section 1.1 for replacement sources.

STANDARD GAS FLOW CONTROL ELEMENTS PROVIDE NEEDLE FLOW ADJUST AND ON/OFF CONTROL WITHOUT CHANGING THE FLOW SETTING.

TID TRANSDUCER POWER AND SIGNAL MEASUREMENT FOR ALL RTIA MODULES REQUIRES A COMBINED CURRENT SUPPLY/ELECTROMETER FROM EITHER SECTION 2.8 (A$4450.each) OR 2.9 (A$5600.each)

AN AIR SAMPLING PUMP AND ADDITIONAL FLOW CONTROL MODULES ARE SPECIFIED IN 5.10 -5.13.

WHEN ORDERING SPECIFY X=1 for 115 VAC or X=2 for 230 VAC in the last digit of part number.

5.1 RTIA, MODEL 400CT(001-904-1X)----------A$7450 each
RTIA module contains a TID-1 SOURCE installed in a TID TRANSDUCER TOWER which is coupled to a 3/8 inch ODX1/4inch IDX4 inch long REACTOR TUBE. Both the TID TRANSDUCER and REACTOR are heated by a common TEMPERATURE CONTROLLER for isothermal operation in the range 50℃to 350°C.

5.2 RTIA, MODEL 400CG (001-904-5X) ----------A$7800.each
Same as Model 400CT and includes one GAS FLOW CONTROL ELEMENT for H2 flow up to 50mLlmin.

5.3 RTIA, MODEL 400CD (001-904-6X)----------A$8250.each
Same as Model 400CG and includes a second GAS FLOW CONTROL ELEMENT for Air up to 500mLlmin.

5.4 RTIA, MODEL 400CF(001-904-3X) ----------A$8700.each
Same as Model 400CD and includes fittings for adding an EXIT PURGE gas flow at the exit of the TID TRANSDUCER. Purge gas is used to eliminate condensation in exit tubing when operating with an air sampling pump and detection modes that generate water (eg., NPD) or other condensables.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

INLET ACCESSORIES

5.4 3/8x1/4x1/16 SWAGE TEE (050-061-00) ----------A$410 each
3/8 inch x 1/4 inch Swage fitting bored through for clearance of 1/4 inch tube, and fitted with a 1/16 inch Swage side port between the 3/8 and 1/4 ends. Includes a 1/1 6 Swage cap, and 3/8 and 1/4 inch Graphite ferrules .

5.5 3/8x3/8 SWAGE ELBOW X 1/16 SWAGE TEE (050-081-00) ----------A$410 each
3/8inchx3/8inch Swage elbow fitted with a 1/16inch Swage side port at the elbow between the two 3/8 ends. Includes a 1/16 Swage cap, and 3/8 inch Graphite ferrules.

5.6 GLASS SAMPLE TUBES(050-070-00) ----------A$135./pkg
4mm 10 X 6mm 0D X 11.5 cm long glass tube. Package of 2. Use with item 5.4 above as a vaporization chamber for non -volatile residues left on ceramic rod used in stirring liquid samples.

5.7 GLASS SAMPLE TUBES WITH INTERNAL GLASS FRIT(0 50-072-00)----------A$210/pkg
Glass tube as in 5.6 with an internal glass frit restrictor. Package of 2. Use for inserting solid samples into RTIA reactor via item 5.4 above.

5.8 2mm 0D. CERAMIC SAMPLE ROD(050-073-00)----------A$90/pkg
2 mm 0D x 10 cm long alumina ceramic rod for inserting non -volatile liquid residues into hot reactor. Use with 5.7 and 5.4 above. Package of 2.

5.9 1mm 0D. CERAMIC SAMPLE ROD(050-074-00)----------A$90./pkg
1 mm 0D x 10 cm long alumina ceramic rod for inserting non-volatile liquid residues into hot reactor. Smaller thermal mass provides faster heat -up than 5.8 when inserted into reactor. Use with 5.7 and 5 .4 above. Package of 2.

PNEUMATICS ACCESSORIES

5.10 AIR FLOW CONTROL MODULE(003-904-10) ----------A$600 each
Separate module containing one GAS FLOW CONTROL ELEMENT for air flow up to 500mLlmin. and associated inlet/outlet fittings.

5.11 H2 FLOW CONTROL MODULE(003-904-20) ----------A$600 each
Separate module containing one GASFLOW CONTROL ELEMENT for H_2 flow up to 50mL/min.and associated inlet /outlet fittings.

5.12 DUAL FLOW CONTROL MODULE (003-904 -30) ------~ ----------A$1050 each
Separate module containing both air and H_2 GAS FLOW CONTROL ELEMENTS and inlet/outlet fittings.

5.13 AIR SAMPLING PUMP(003-904-41) ----------A$390.each
Sampling pump provides approximately 1.5 L/min maximum flow when connected to RTIA exit.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

2.4 FTID TOWERASSEMBLY (041-862-20) ----------A$4500.each FOR MOUNTING ON VARIAN GC MODELS 3400/3600/3800: Stainless steel/ceramic tower mounts onto existing FID or NPD base on GC with thermionic source remotely positioned from flame jet. Includes a flame ion suppress capability for improved performance of FTID mode. Select TID-1 source (FTID-1mode with ion suppress capability.TID-1-N2, TID-1-02 model, TID-2 source (FTID-2 mode. TID-2-H2/Airmode).TID-3 source(TID-3-N2.orTID-3-02 mode).TID-4-H2/Air (NPDI, TID-5-H2/Air or CFID source (Remote FID mode). Larger internal volume than TID/FID tower.

2.5 TANDEM TID TOWER/JET ASSEMBLY (011-870 -XX) ---~ ----------A$6255each
A series combination of two independently controlled thermionic and/or flame ionization detection stages provides two different modes of response simultaneously for each sample. Tower hardware mounts onto the existing FID or NPD base on GC and consists of a MODIFIEDTID/FID(REMOTE FID for Agilent/HP GCs) TOWER ASSEMBLY coupled to a TID TRANSDUCER TOWER/TUBE INLET. The MODIFIED TOWER contains an AUXILIARY GAS INLET PORT for introducing an additional detector gas flow between detection stages 1 and 2. The two TOWER structures can also be decoupled for separate operation of each structure. For a COMPLETE DETECTOR HARDWARE ASSEMBLY. select any thermionic source type. or an FID probe, from section 1.1 for each stage of detection (i.e. two thermionic sources required for two stages of TANDEM TID). Simultaneous response combinations include: FID & FTID-2 (not available for Agilent/HP GCs);TID-1-N_z&TID-2-H_z/Air;TID-1-Air & TID-2-H2/Air;TID-2-H2/Air & FTID-1; TID-1-N_z & TID-1-Air; TID-1-Air & HWCID.(HWCID -hot wire combustion ionization detection provides jetless FID type responses in a flame environment continuously maintained by a hot wire. HWCID is 100 times less sensitive than an FID, but provides better linearity at high sample concentrations, and a factor of 2 enhancement for aromatic hydrocarbons relative to alkane hydrocarbons.) The first detection stage (011-865-XX) can be purchased separately for A$5275.,and the second detection stage can be added later as needed.

FOR MOUNTING ON AGILENT 6890 FID BASE(XX = 13) OR HP 5890 FID/NPD BASE (XX = 12) b.c

FOR MOUNTING ON VARIAN GC MODELS 3400/3600/3800 (XX =20) c

2.6 TANDEM TID/FID TOWER/JET ASSEMBLY (012-872-XX) ----------A$7550 each
The same first detection stage as in section 2.5, but the second stage is an FID TRANSDUCER/JET ASSEMBLY that attaches to the exit port of the first stage. The second stage features a 1/8 inch 00 X 1/16 inch ID ceramic jet flame tip. The FID transducer contains a fourth gas inlet for O2 or air to sweep the outer periphery of the jet. For a COMPLETE DETECTOR HARDWARE ASSEMBLY, select any thermionic source from section 1.1 for the first stage and the FID probe for the second stage. As in section 2.5, the first detection stage (011-865-XX) can be purchased separately, and the second stage added later as needed. Available for the same GC models listed in section 2.5.

b requires DET electrometer, c supplied with DET jet, or Agilent wide bore jet.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

6. TFID STAND-ALONE MODULES
(Thermionic/Flame Ionization Detectors)

TFID MODULES provide stand-alone GC-type detectors for screening vapors evolved from Head Space Analyzers. Thermal Desorbers, PurgelTrap Instrumentation. and other sample handling instruments.
Screening such vapors indicate whether the sample needs to be analyzed further with time consuming chromatographic techniques. and provides information on dilution factors required for subsequent GC or GC/MS analyses.
The detectors consist of temperature controlled transducers equipped with standard Swage-type inlet fittings. and provide universal flame ionization responses and element selective thermionic ionization responses according to the equipment configuration selected. The detector response is determined by the type of thermionic source element used in the transducer and the type of gases supplied to the transducer. Selective modes of thermionic ionization include the following: TID-2-H2/Air (NPD). selective for Nitrogen or Phosphorus compounds; TID-4-H_2/Air(NPD). best Nitrogen response for the NPD; TID-1-N2. selective for nitro-compounds, oxygenates. and some halogenates; TID-3-N2. selective for volatile halogenates.
Custom modules configured for PTID, Remote FID. or Tandem TID operation are also available, as well as modules configured for samples in an incoming Air stream.

Transducer power and signal measurement for all TFID modules is provided by a COMBINED CURRENT SUPPLY/ELECTROMETER (Section 2.8) or a COMBINED CURRENT SUPPLY/ELECTROMETER/READOUT (Section 2.9). The electrometer provides a 0 to 1 Volt analog output signal.

Standard gas flow control elements provide needle flow adjust and on/off control without changing flow setting.

ORDERING INFORMATION: The input voltage for the TFID modules is designated by the last digit " X" in the module part number according to the following code: X=1 for 115 VAC, X=2 for 230 VAC

Thermionic source elements are interchangeable in the transducer structure. Source types are designated by the first digit "S" in the module part number according to the following code:

S	SOURCE TYPE	S	SOURCE TYPE	S	SOURCE TYPE
0	TID-1	3	TID-3	5	TID-4
1	T10-2	4	FID Probe	6	TID-6

6.1 TFID,MODEL 06200 (S01-906-3X)----------$8400 each.

TFID module contains a TRANSDUCER TOWER with a TOWER GASPURGE and a 1/16 JET/TEE INLET.
The inlet contains a 1/16 inch 0D X.031inch10 ceramic jet which fits into the base of the tower, and 1/16 Swage tee fittings which connect to the sample stream, as well as an INLET GAS PURGE which mixes with the sample and flows through the inside of the jet. The TOWER GASPURGE sweeps the outer periphery of the jet. For flame ionization detection, Hydrogen is provided through the INLET GAS PURGE and Air through the TOWER GAS PURGE.
For thermionic ionization detection, other type gases may be provided through the INLET and TOWER GAS PURGE . The transducer is heated by a TEMPERATURE CONTROLLER for isothermal operation in the range of 50℃ to 350℃ .
The INLET GAS connects to a FLOW CONTROL ELEMENT for H2 and other gas flows up to 50mLlmin.
The TOWER GAS connects to a FLOW CONTROL ELEMENT for Air and other gas flows up to 500mLlmin.
This TFID MODULE can be configured to provide FID, CFID. TID-1-N2, TID-2-H2/Air, TID-3-N2, TID-4-H2/Air, and TID-5-H2/Air modes of detection depending on the source element and the purge gases supplied.

CT/DET PRICE LIST 2006
but at XR USD=0.95xAUD Jan 2011

6.2 TFID ,MODEL 125DT(S11-906-1X) ----------A$6150 each.
TFID module contains a TRANSDUCER TOWER with a 1/8 inch Swage INLET for the incoming sample. The transducer is heated by a TEMPERATURE CONTROLLER for isothermal operation in the range of 50℃ to 350°C. This TFID MODULE configuration can provide TID-1-N2and TID-3-N2 modes of detection depending on the source element used and the use of N2 as the carrier for the sample vapors. TID-1-Air and TID-3-Air modes are also possible when Air is the carrier gas for the sample vapors. .

6.3 TFID, MODEL 125DN (S11-906-2X)----------A$6900each.
Same as Model 125DT except for an added Hydrogen Flow Control and an Inlet Tee for adding Hydrogen to an incoming gas stream of sample vapors and Air. This configuration provides NPD (TID-2orTID-4) detection.

ORDERING INFORM ATION

PRICES SUBJECT TO CHANGE WITHOUT NOTICE; FOB

VISA, MASTER CARD, CREDIT CARDS ACCEPTED.

DOMESTIC TERMS: 2% 10, NET 30 DAYS
DOMESTIC SHIPMENTS NORMALLY VIA UPS 2ND DAY (BLUE)

EXPORT TERMS: A DVANCE PAYMENT FOR NEW ACCOUNTS. EXPORT SHIPMENTS NORMALLY VIA UPS AIR (UNLESS OTHERWISE SPECIFIED); FOB PORT OF EXPORT IS SAN FRANCISCO, CALIFORNIA, USA.

TOTAL SHIPPING WEIGHTS: DETECTOR HARDWARE AND CURRENT SUPPLY ----------12 POUNDS (5.4Kg)
DETECTOR HARDWARE AND CURRENT SUPPLY/ELECTROMETER ---17 POUNDS (7.7Kg) RTIA AND CURRENT SUPPLY/ELECTROMETER ----------26 POUNDS (12Kg)
TFID AND CURRENT SUPPLY/ELECTROMETER ----------26 POUNDS (12Kg)

RETURN POLICY: Thermionic Sources -only un-opened packages accepted -15% restocking charge. Detector Hardware Structures and Electronics -these are custom assembled per customer' s requirements -return of unused units not accepted without prior approval from DET.