

MatchMaker propels your existing MCA instrumentation into ORTEC's world of GammaVision-32 and other 32-bit spectroscopy applications — easily and quickly via the Ethernet.

MatchMaker's Benefits . . .

- An interface between a variety of non-ORTEC ADCs and your computer
- Ethernet computer connection
- Fully *CONNECTIONS* compliant — add any ORTEC MCB, now or later
- Battery backed-up data memory — outside the computer
- Simultaneous live time, real time, ROI count, ROI integral, overflow, and statistical presets
- Includes sample changer hardware control
- Optional utilities to convert spectral files from one format to another

The MatchMaker EtherNIM Acquisition Interface gives many people currently using non-ORTEC MCA products¹ the widest possible benefit of ORTEC's *CONNECTIONS-32* open architecture. Not only does this give you the benefit of economical PC hardware and off-the-shelf applications software, it also gives the benefit of spectroscopy software applications such as MAESTRO-32, GammaVision-32, ScintiVision-32, AlphaVision-32, Renaissance-32, MGA, Isotopic, and PC/FRAM. MatchMaker, an EtherNIM product, is a full member of the ORTEC family of *CONNECTIONS*-compliant modules.

All ORTEC MCBs (multichannel buffers), from the Model 918 (vintage-1983) to the digital DSPEC, have integral ADCs. MatchMaker provides all the benefits of the MCB and a connection to external ADCs from a variety of vendors. This makes system upgrades economical and easy — only the outdated computer and software are replaced. The link between MatchMaker and an ADC is a ribbon cable (supplied).

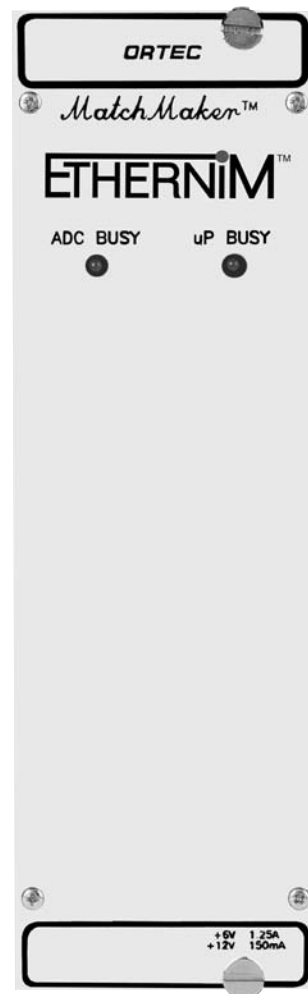
With MatchMaker's integral Ethernet Port, just a simple coaxial connection connects you to the network. After that, the *CONNECTIONS* auto-configure utility will seek out the MatchMaker and configure the system correctly: you only need set the ADC type! The time between unpacking the computer to taking data is less than 10 minutes. You can connect a virtually unlimited number of MatchMakers to one PC.

As an otherwise "traditional" MCB, MatchMaker is compatible with all applications developed using the ORTEC UMCBI (Unified Multichannel Buffer Interface). With this open architecture and two Programmer's Toolkits, programming the MatchMaker is easy and convenient, either in C or Visual Basic®.

Program It Yourself?

Are you faced with the need to develop Windows spectroscopy applications to control hardware and want to be up and running *FAST*?

ORTEC's Programmer's Toolkits allow you to take control of the MatchMaker and your ADC **EASILY** from, for example, Visual Basic or C++. For you the mystery of Ethernet communications is solved.



¹Currently supported are many ADC models from Canberra Industries, Nuclear Data, and Silena.

MatchMaker™

EtherNIM™ Acquisition Interface Module

Specifications

Memory Up to 16384 channels are accessible depending on the ADC resolution. Memory is nonvolatile, capacity $2^{31}-1$ (2 billion) counts per channel.

Presets

Real Time In multiples of 20 ms.

Live Time In multiples of 20 ms.

Region-of-Interest Peak count.

Region-of-Interest Integral count.

Data Overflow Terminates when any channel exceeds 2 billion.

Statistical Preset Allows setting the required statistical accuracy on a key peak net area.

Front-Panel Indicators

CPU BUSY Red LED, intensity indicates the activity of the microprocessor.

ADC BUSY Red LED, flashes once for every pulse digitized by ADC.

Interface Connectors*

Ethernet Rear-panel BNC connector, accepts IEEE 802.3 10BASE2 (thin-wire coax).

ADC Interface

J1 34-pin header, labeled J1, connects to Nuclear Data or Canberra ADCs with a 34-pin interface connector.

J2 26-pin header, labeled J2, connects to Canberra ADCs that have a 26-pin interface connector.

J3 36-pin header, labeled J3, connects to ORTEC 800 and Seiko ADCs.

J4 38-pin header, labeled J4, connects to Silena ADCs.

Sample Changer Connectors

Change Sample and Sample Ready Rear-panel BNC connectors for change sample and sample ready, respectively; software controlled.

Electrical and Mechanical

Power Requirements +12 V, 150 mA; +6 V, 1.25 A.

Dimensions NIM-standard double width 6.90 x 22.13 cm (2.70 x 8.714 in.) front panel per DOE/ER-0457T.

Weight

Net 2.25 kg (5 lb).

Shipping 3.1 kg (7 lb).

PC Prerequisites Windows 2000/XP operating system. Ethernet capability.

Supported ADC Hardware

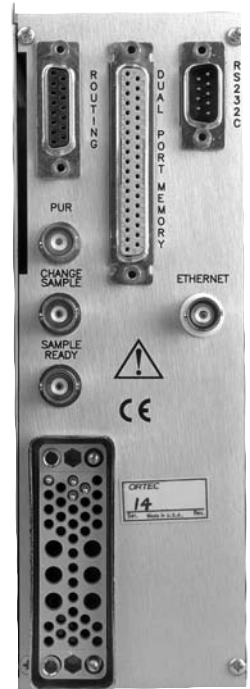
Canberra — Models **8075, 8077, 1510, 8701, 8706, 8713, 8715** (May be components in: CI Series 30/35 [external ADC option]; Series 85/90/95 [external ADC option]; S100.)

Canberra/Nuclear Data — **560, 570, and 580 Series** (May be components in: Genie "AIM" systems [NOT ICB NIM]; Genie 9900; Accuspec "B"; μ MCA module; ND62 [External ADC option, including top mount version]; ND65 series [external ADC option]; ND66/76 series; ND6600, ND6700, ND6680 Series.)

Silena — Models **7411, 7423** (May be components in Silena's Cicero; Varro; Livius; SIMCAS; NIM Series 8900; Memory Buffer 7328.)

Ordering Information

Model No.	Description
MatchMaker	MatchMaker hardware only
Options	
ETHRJ45	10Base2 to 10BaseT Hub with four 10BaseT connections and one 10Base2 connection with cables, tee connector, and 50- Ω terminator for MatchMaker connection directly to any thin-wire Ethernet installation.
A11-B32	32-bit UMCBI Programmer's Toolkit



*The following connectors are also available:

Dual-Port Memory — ORTEC dual-port interface, 37-pin D connector.

RS-232-C — Serial standard RS-232-C 25-pin; male wired as DTE to run at 38.4 kbaud maximum, with modem control. Software selectable baud rate. (For diagnostics)