



# Real-Time Pricing



## Customer Value

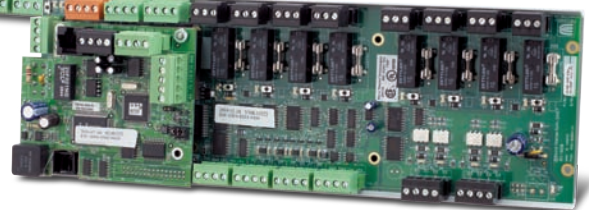
Micro Thermo Real-Time Pricing application is one of the components of the overall Micro Thermo Energy application. This application, which operates via a MT-560 Communication Gateway control board that can be connected to any board in the MT-500 family, works in conjunction with Micro Thermo's existing Energy application to optimize supermarket energy consumption and lower energy costs. It compares the regional energy cost obtained, where available, from the local power company via Internet to a pre-determined, user-specified cost chart that is set up in accordance with a store's specific needs, and then determines the proper Load Shedding level to apply.

Individual stores can obtain latest energy costs for their area and use Micro Thermo's Real-Time Pricing application to determine Load Shedding levels on a store-by-store basis. Chain supermarkets can also use Real-Time Pricing to determine load shed levels and then can broadcast global Load Shedding strategies to stores via store intranet.

## Energy Nodes



MT-508 Energy Node



MT-508 in conjunction with MT-560 Communication Gateway control board for Real-Time Pricing

## Key Features and Benefits

- Real-Time adjustment of energy consumption within any store
- Ethernet connector mounted on the board for a direct reading of energy cost
- No need for extra system from "Real-Time Pricing Company", your Micro Thermo System can do it all
- Overall Load Shedding strategy getting optimized by this feature
- Handle two optocouplers for pulse reading (KWH, GPM, CFM, etc.)



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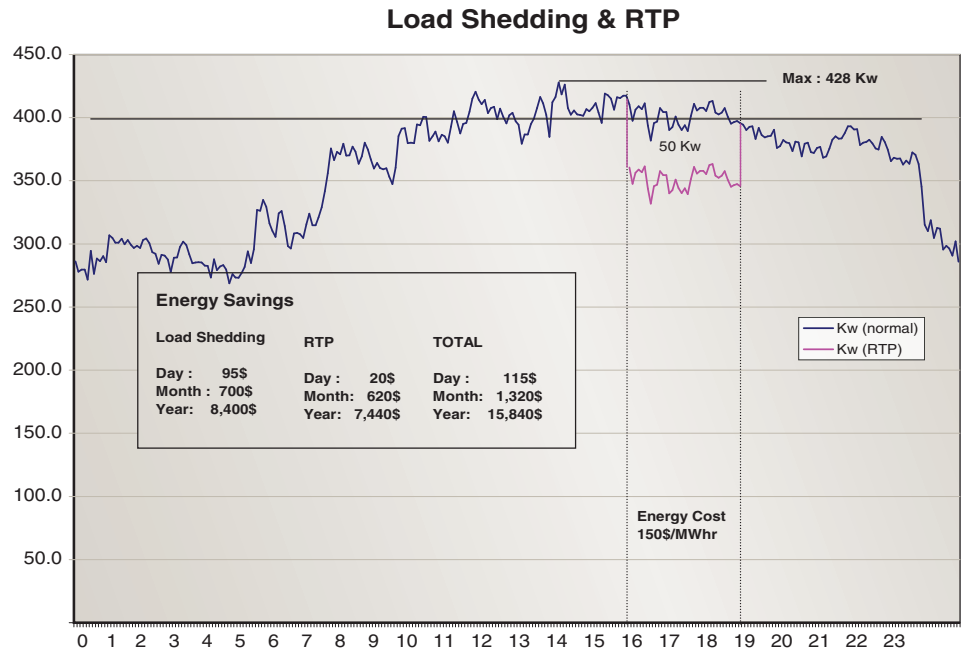
## Load Shedding & RTP

In the graph to the right, we have exported the kW consumption from a live store of approximately 50,000 square feet. The dotted lines show the energy consumption from 4 to 7 PM.

Between the dotted lines you see another line in pink. This line shows you the savings that could have been achieved at this site by using Micro Thermo's Real-Time Pricing application.

We have simulated, using a historical database of the energy cost for this region, the energy savings for a day, month, and year using Micro Thermo's Energy and/or Real-Time Pricing application(s). The results are shown in the Energy Savings table. The payback for a Real-Time Pricing application is two months.

With the combination of Micro Thermo's Load Shedding and Real-Time Pricing applications, your stores will be more energy efficient than ever. All this can be achieved without any third party components.



Specifications – MT 560	
<b>Applications</b>	Method to determine Load Shedding level via Energy cost information received from the internet
<b>Universal Inputs</b>	None
<b>Digital Inputs</b>	2 Optocoupler Inputs 0-5V for pulse reading
<b>Digital Outputs</b>	None
<b>Analog Outputs</b>	None
<b>Ethernet Port</b>	1 RJ45 connector
<b>Dimensions</b>	4.0" x 3.5" x 2.0" (104mm x 88mm x 55mm)
<b>Mounting</b>	Piggy back on any board of the MT 500 family
<b>Electrical</b>	24 Vac Center Tap Transformer 12VA
<b>Environmental</b>	Operating and Storage: -40 – 75°F (-40 – 168°C) 5-95% RH, noncondensing

## Supermarket Controls Solutions...Simply Powerful



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