TMI-USA

High Performance Data loggers for Industrial Strength Applications

TMI ORION Passive Wireless 2013

TMI-USA

Passive Wireless 2013

TMI-ORION

Variables

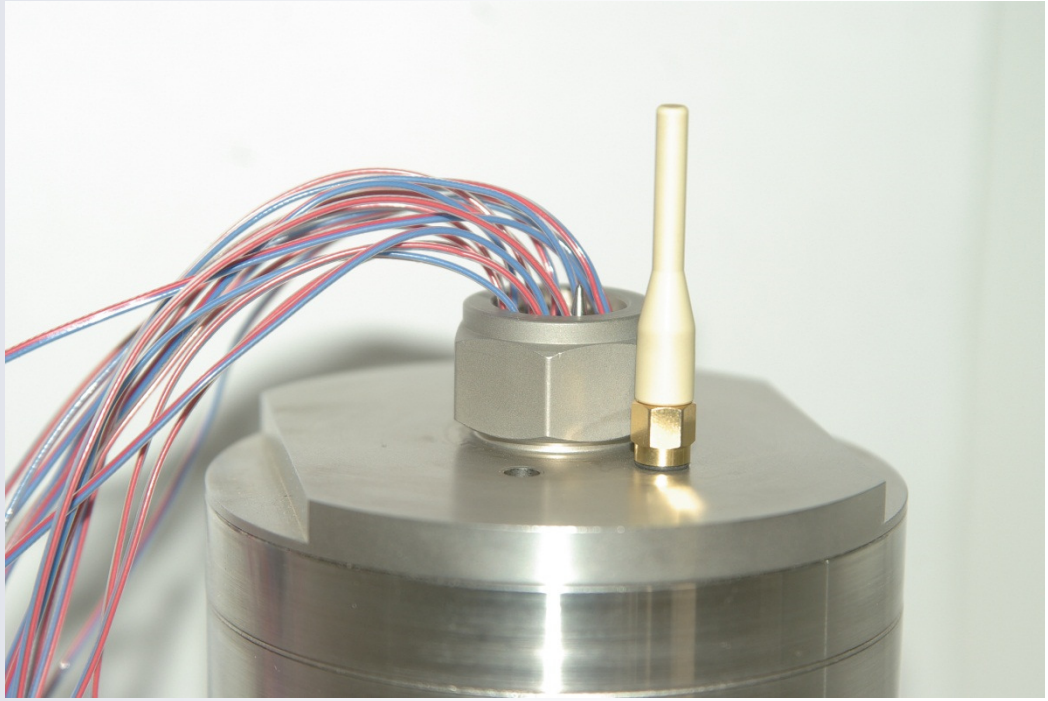
Temperature
Pressure
Humidity
Air speed
Force
Electrical Current
Resistance
Distance
Water Activity

TMI: Cross Section of Industries

- Food processing
- Pharmaceutical, Health care
- Chemistry
- Ceramic & Tile
- High Heat – Brick, Foundry, Electronics
- Aeronautics/Aviation
- Manufacturing – Automotive, Mechanical

2,4GHz Real time data

Both RTD & Thermocouple



Zigbee communication protocol based on norm 802.15.4
ISM Band (Industry Scientific Medical)

Data Logger families

PicoVACQ
15x22mm

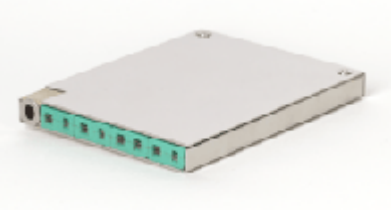
Pressure
Temperature

Temperature
Long 1Td Probe

NanoVACQ
31x39mm

Temperature
Long 1Td Probe

Thermocouple

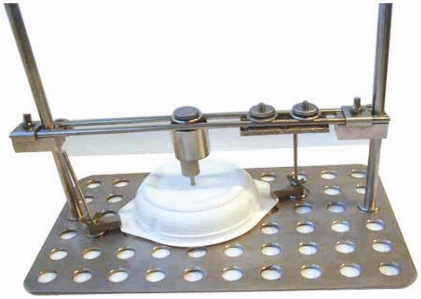


VACQ
Autoclave

Rotation

Humidity

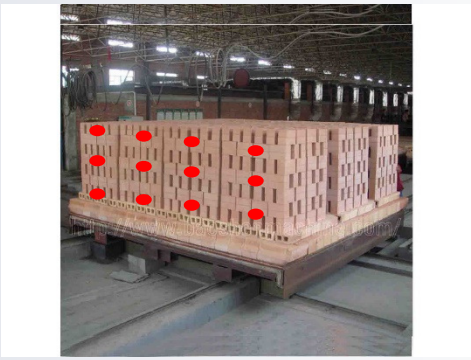
Package Deformation



Industrial Applications

Aviation

Brick/Ceramics



Metal Foundry

Autoclave/Retort

Cyrogenics

2,4GHz Real time data

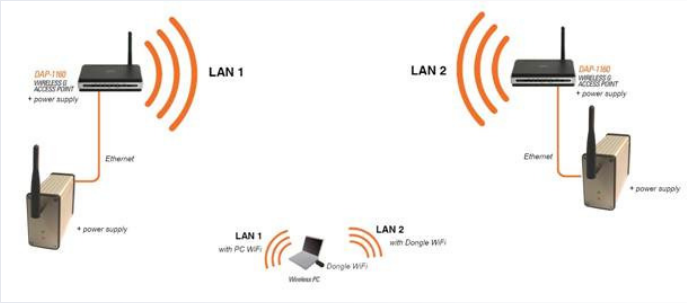
Strength Unmatched

- RF Signal Strength Unmatched
- "Remote" antenna in water immersion
- Open architecture solution for ERP
- RF end to end solution

Ethernet Port
- LAN
- Wireless Access Point

RF Remote Antenna
Full water immersion

RF End to End Solution



Software & Reports

Qlever Software

QLEVER Measurement Report - QLE File: QLb08gdxc000m 20110818 103844 QLb08gdxc0007(3) QLb08gdxc000m.qle Process: PPb08gdxc0002 | Heidolph USA

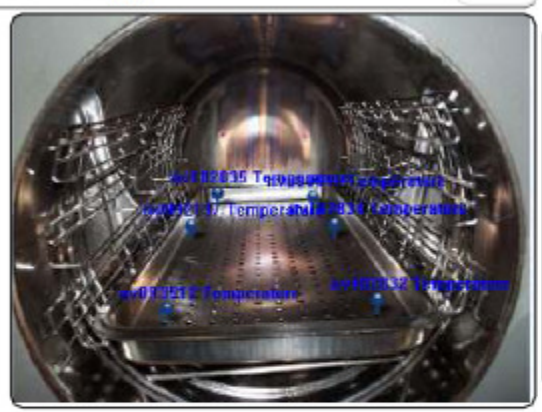
Report not approved

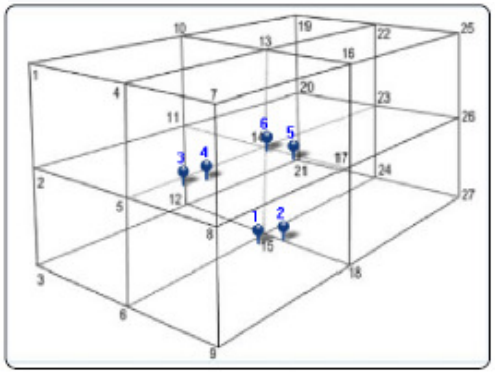
Equipment ID: 2340E (SN-2501699)
SOP/Protocol: PM Service

Units: °F, psi

Programmed: 08/17/2011 14:34:19 by Greg
Started: 08/17/2011 14:34:19 by Greg
Reading: 08/18/2011 15:39:08 by Greg

1241 Jarvis ave Elk Grove IL





Loggers Description				
Temperature loggers included in the study	Sensor	Sensor location	Description	Reference channel
nv102834	Temperature	Middel Left side of Chamber	Configuration date: 08/08/2011 22:11:33 Firmware: N2G4T3A2m503	No
nv093512	Temperature	Front Left side of Chamber	Configuration date: 08/10/2011 08:47:08 Firmware: N2G4T3A2m503	No
nv102832	Temperature	Front Left side of Chamber	Configuration date: 08/08/2011 22:10:56 Firmware: N2G4T3A2m503	No
nv092137	Temperature	Middle Left side of Chamber	Configuration date: 08/08/2011 22:12:33 Firmware: N2G4T3A2m503	No
nv102835	Temperature	Back Right side of Chamber	Configuration date: 08/08/2011 22:11:58 Firmware: N2G4T3A2m503	No

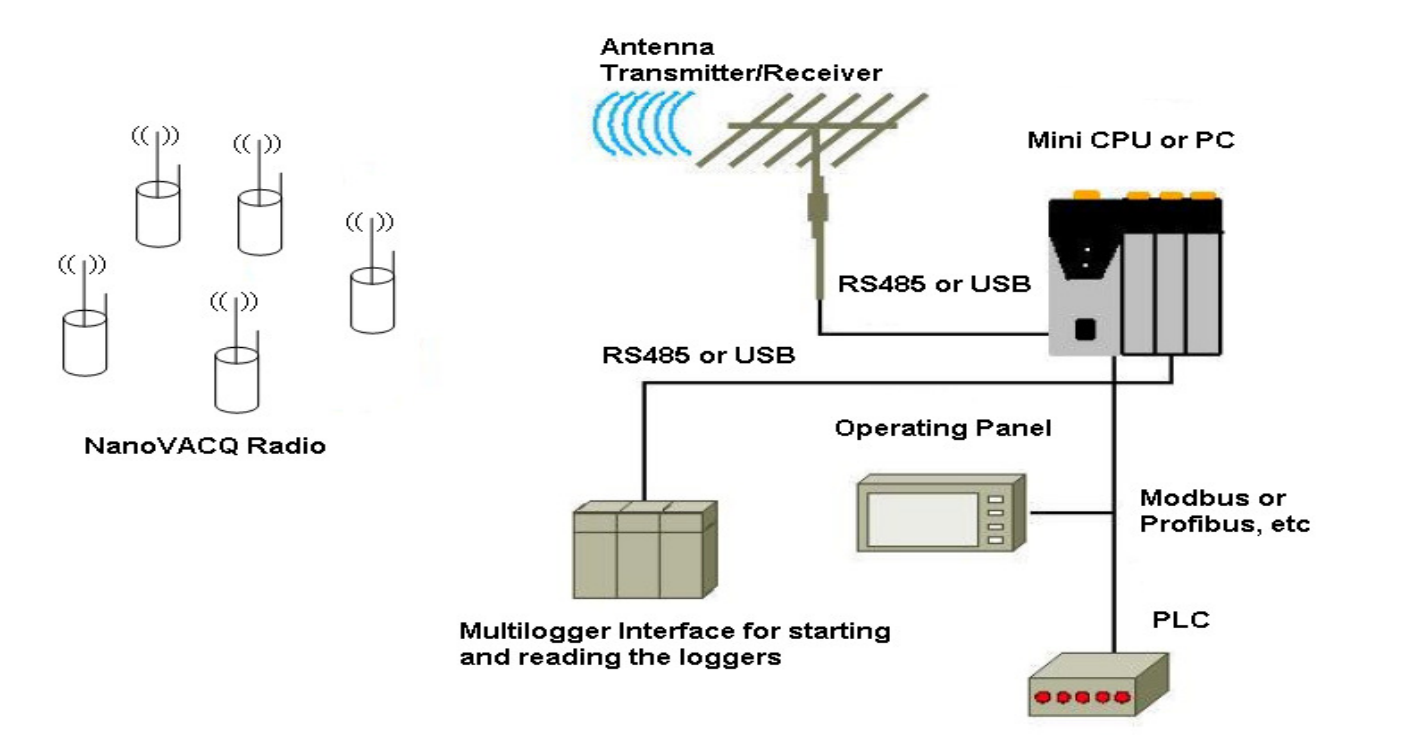
TMOrion QLEVER 2.0.26.0 b0a3cdP Performed by _____ Date _____ Reviewed by _____ Date _____ | Printed by Chris | 10/25/2011 | 10:02:56 | 2/24

Qlever Software

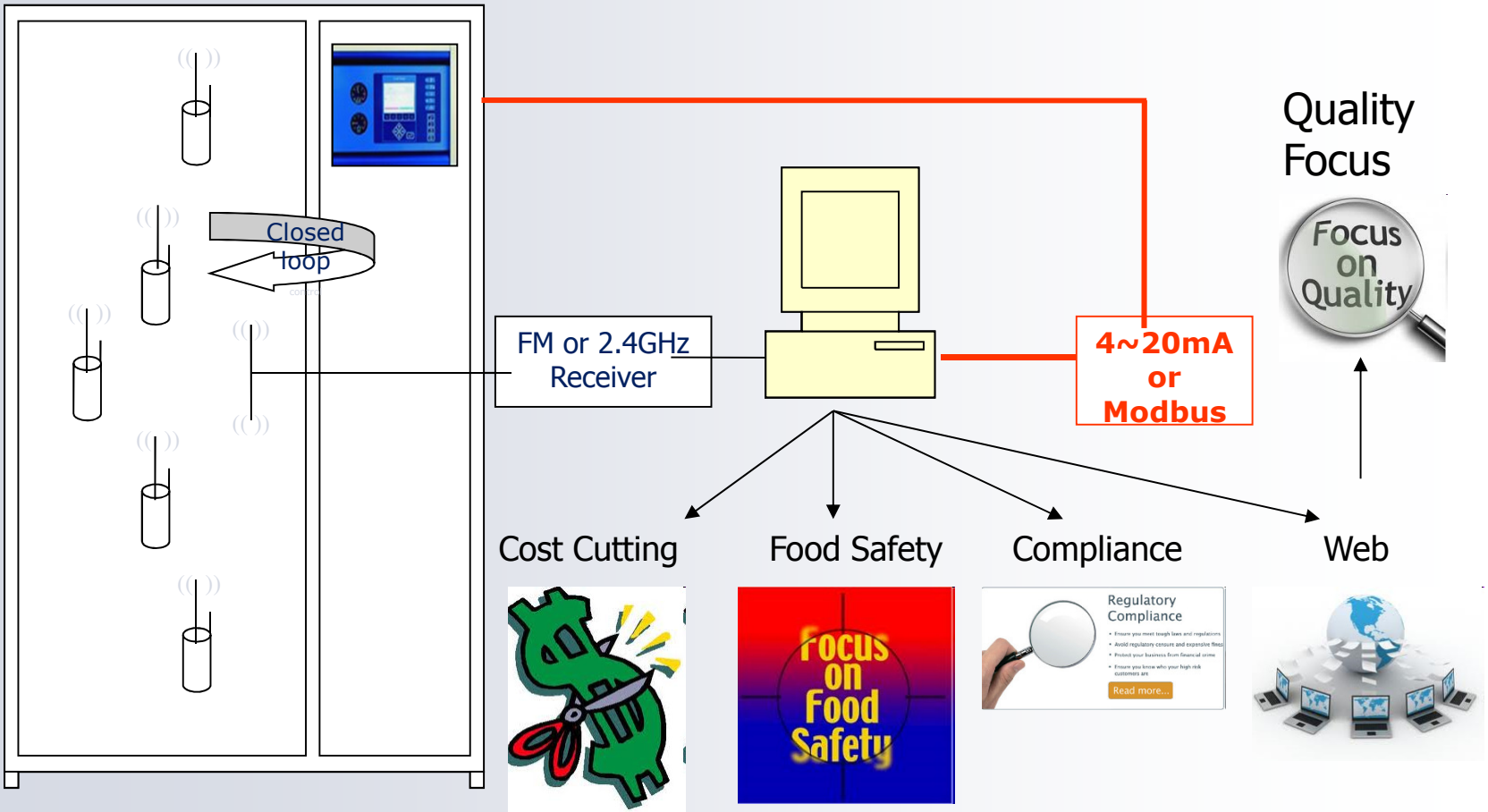
- Easy to Use
- F(0) in Real Time
- Temperature Distribution
- Drag & Drop onto Photo/Grid
- Heat Penetration
- Annotations
- Calculations, Offsets, F(0)

Wireless Control

- Wireless Control System



Tying it all Together



Validation
End-To-End Supply Chain

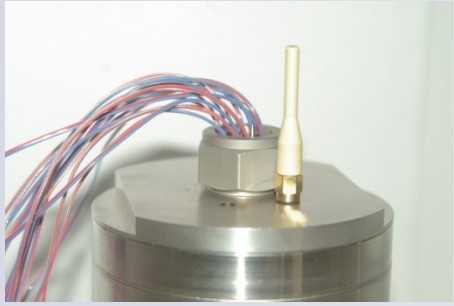
- A fun example: Moroccan Fish & Google Maps!

Innovation

TMI Competitive Advantage

- We are a company of engineers
- Internal R&D
- ***World Class Service -*** ***Your loggers are only as the service***
- ***Staying ahead of the industry***
- ***Custom solutions***

VACQ Autoclave



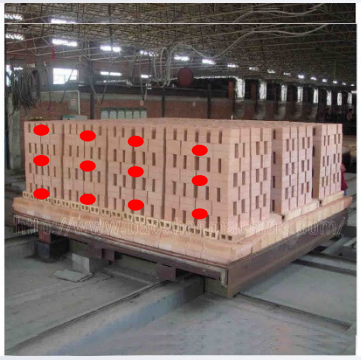
Rotation

Fastest, Smallest

Industrial Applications

Aviation

Brick/Ceramics



Metal Foundry

Autoclave/Retort

Cyrogenics

Supplier
-Proven Solutions

Consumer
-Extend Capabilities
-Transmit through water

Contact

TMI-ORION

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