



**The IP&E  
Specialist**

# RF / Wireless Line Card

TTI, Inc., – A Berkshire Hathaway Company



# The IP&E Specialist

## The Specialist in Electronics Component Distribution

Founded in 1971, TTI has steadily grown to become a world leading specialist distributor of electronic components. The company was founded on the premise that passive component purchasing could be made more efficient by offering product specialization, customer-driven service and proprietary supply chain solutions.

### Why TTI?

- **Technical Experts** TTI's European team of field-based Sales Engineers and local Product and Technical Specialists are here to support you; from understanding component trends, sustainable sourceability and new product roadmaps, to in depth technical support for your design from our technical engineering experts.

- **Value Added Services** Connector assembly is one of the most important value-added services at TTI, Inc. – Europe. We are specialized in distributing manufacturer controlled and certified connectors and interconnect solutions from globally leading suppliers. Thanks to a large inventory level of connector components, TTI, Inc. – Europe can serve any market requirements.

- **Global Distribution Centers** Our European headquarters is located just outside of Munich, Germany in Maisach-Gernlinden. In total, we have 45.000m<sup>2</sup> of dedicated warehouse space and local sales and technical support in over 40 locations across Europe. TTI has more than 195.000m<sup>2</sup> of automated warehousing in North America, Europe and Asia. All are linked into a global warehouse management system that provides superior customer service and overall business efficiencies. Wherever you are in the world, TTI can support you. Year after year, customers rate our inventory availability, on-time delivery and accuracy among the very best in the industry – contact us today to find out what a true specialist has to offer.

- **Quality and Reliability** TTI's global warehouses are all ISO-registered and have received certification to the ISO 9001 and ISO 14001 Standards. TTI Europe is also certified to EN9120/EN9100, IECQ-CECC and ISO/IEC 27001 Standards. Additionally, our European sales branches are ISO 9001 certified. TTI has one global documentation system that ensures that every TTI branch and warehouse in the world follows the same processes.





**80+**  
Suppliers



**45.000 m<sup>2</sup>**  
Warehousing Space



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Sales Locations

**24/7**  
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## Sending More Data Farther Distances

TTI partners with premier suppliers to stock a broad and deep inventory of RF components that operate over the entire spectrum of frequencies and all wireless networks including: Bluetooth, Wi-Fi, ZigBee, UWB, 4G/5G, GNSS and ISM band protocols. Contact a TTI Specialist when your next design calls for a wireless solution at <https://www.ttieurope.com/content/ttieurope/en/resources/ask-the-expert.html>

### Line Card

3M  
 Abracon  
 Amphenol  
   Amphenol CIT  
   Tri-Star  
 MCP  
 RF  
 EATON  
   Souriau-Sunbank  
 Harwin  
 ITT Cannon  
 JAE  
 JST  
 Kyocera AVX  
 Laird Technologies  
 Molex  
 Murata  
 Panasonic  
 Radiall  
 Rosenberger  
 Samsung  
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 Schaffner  
 Schurter  
 Smiths Interconnect

Taiyo Yuden  
 Taoglas  
 TDK  
   EPCOS  
 TE Connectivity  
   Linx Technology  
   Laird Connectivity  
 Tusonix  
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 Vishay  
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   KEMET  
   Pulse



**Rosenberger**



**Amphenol**



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interconnect**

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**TAIYO YUDEN**



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**TDK**



**cts | Tusonix**  
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YAGEO GROUP



**YAGEO**  
YAGEO GROUP

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## Application Examples

### EV Charging

- Wallbox
- DC Charging Stations
- Energy Storage

### HVAC

- Heat Pumps
- Air Conditioning
- Smart Thermostats

### Telematics

- Fleet Management
- Construction Machines
- Off-road Vehicles

### Smart Agriculture

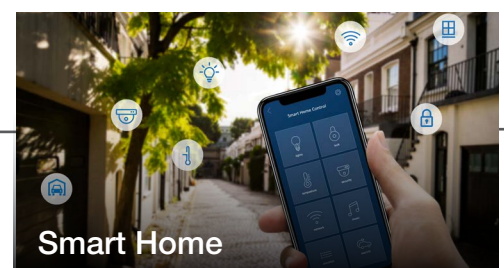
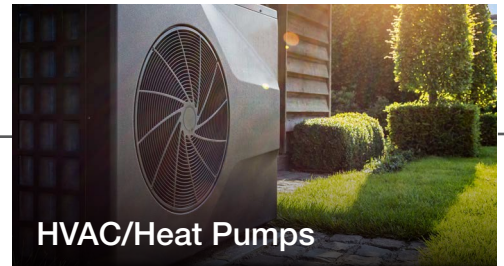
- Autonomous Tractors
- Robotic Lawn Mowers
- Spraying Equipment

### Smart Industry

- Automated Guided Vehicles
- Predictive Maintenance

### Smart Home

- Smart Lighting
- Alarm Systems
- Smart Blinds



# RF / Wireless Line Card

## Connectors

	Amphenol RF	Amphenol CIT	EATON (Souriau-Sunbank)	ITT Cannon	JAE	JST	Kyocera AVX	Molex	Radiall	Rosenberger	Samtec	Smiths Interconnect	Taoglas	TE Connectivity
<b>RF/Coaxial/ Microwave</b>														
1.0/2.3	■							■	■	■	■			■
1.6/5.6	■							■	■	■	■			■
7/16	■		■					■	■	■				■
BMA	■							■	■	■				■
BNC (50/75Ω)	■		■					■	■	■	■			■
BNC (Miniature)	■							■	■	■	■			■
B to B Blindmate/Compression	■							■	■	■	■			■
BSA	■							■	■	■				■
FAKRA	■				■			■	■	■			■	■
MCX/MMCX	■		■		■			■	■	■				■
MHV/SHV	■							■	■	■				■
Precision1	■							■	■	■	■			■
QMA	■							■	■	■				■
Reverse Polarity2	■							■	■	■				■
Shielded Terminators	■							■	■	■				■
SMA	■		■	■	■			■	■	■	■	■	■	■
SMB (50/75Ω)	■		■	■	■			■	■	■	■			■
SMB (Miniature)	■			■	■			■	■	■	■			■
SMC	■			■	■			■	■	■				■
SMP	■				■			■	■	■	■			■
SMT	■				■		■	■	■	■				■
SSMA	■							■	■	■	■	■		■
TNC	■							■	■	■	■			■
Triax	■	■	■			■		■	■	■	■			■
Twinax	■	■	■			■		■	■	■	■			■
Type F/G	■							■	■	■	■			■
Type N	■		■					■	■	■	■	■		■
UHF/MiniUHF	■							■	■	■	■			■

## Passives

	3M	Abracon	Amphenol	EPCOS	Harwin	Kyocera AVX	Laird Performance Materials	Molex	Murata	Panasonic Industry	RF 360	Samsung	Schaffner	Schurter	Taiyo Yuden	Taoglas	TDK	TE Connectivity	Tusonix (CTS)	Vishay (Dale)	Yageo KEMET	Yageo PULSE
<b>EMI/RFI &amp; RF</b>																						
EMI/RFI Filters				■		■			■	■	■		■	■	■		■	■	■		■	■
Emi Shielding/Absorbers	■				■		■															■
Feed-Thru Filters				■		■			■		■		■		■			■	■			
RF/Microwave Filters				■		■			■		■			■	■			■	■			■
SAW Filters		■		■		■			■		■				■			■	■			■
Surface Mount Filters		■		■		■			■	■	■				■			■	■			■
RF/Wireless Antennas		■	■			■		■							■	■	■	■				■
Wireless Charging Coils			■				■	■									■			■		■
<b>Frequency Control</b>																						
Crystals		■				■						■									■	
Oscillators		■				■															■	
Piezo Sound Devices						■			■	■							■					
Resonators		■							■		■						■					
Tuning Forks						■														■		

# RF / Wireless Line Card

## Antennas

	Abrakon	Amphenol MCP	JAE	Kyocera AVX	Molex	Panasonic Industry	Radiall	Taoglas	TE (Linx Technology, Laird Connectivity)	Yageo PULSE
<b>Embedded (ceramic/helix/stamp metal)</b>										
NFC									■	■
169 MHz	■							■		■
433 MHz	■				■			■	■	■
LoRa, Sigfox, ISM (868/915 MHz)	■	■	■	■	■			■	■	■
NB-IoT		■		■	■			■	■	■
GPS/GNSS	■	■		■	■			■	■	■
2G/3G/4G/5G	■	■	■	■	■			■	■	■
WiFi/BT/Zigbee (2.4/5 GHz)	■	■	■	■	■			■	■	■
V2V/V2X/DSRC	■	■		■	■			■	■	■
UWB		■	■	■	■			■	■	■
<b>Internal (Cabled PCB/Flex)</b>										
NFC	■	■			■			■	■	■
433 MHz		■			■			■	■	■
LoRa, Sigfox, ISM (868/915 MHz)	■	■		■	■			■	■	■
NB-IoT	■	■		■	■			■	■	■
GPS/GNSS	■	■		■	■			■	■	■
2G/3G/4G/5G	■	■		■	■			■	■	■
WiFi/BT/Zigbee (2.4/5 GHz)	■	■		■	■			■	■	■
V2V/V2X/DSRC	■	■		■	■			■	■	■
UWB		■		■	■			■	■	■
<b>External</b>										
AM/FM/DAB								■		
169 MHz	■							■	■	■
TETRA	■							■	■	■
433 MHz	■	■						■	■	■
LoRa, Sigfox, ISM (868/915 MHz)	■	■		■	■			■	■	■
NB-IoT	■	■		■	■			■	■	■
GPS/GNSS	■	■		■	■	■	■	■	■	■
2G/3G/4G/5G	■	■		■	■		■	■	■	■
WiFi/BT/Zigbee (2.4/5 GHz)	■	■		■	■		■	■	■	■
V2V/V2X/DSRC				■	■			■	■	■
Combination antenna	■	■		■	■			■	■	■

## Wireless Modules/ Wireless Sensors

	Murata	Panasonic Industry	Taoglas	TE (Linx Technology, Laird Connectivity)
<b>Wireless Modules</b>				
Bluetooth	■	■		
Cellular	■			
GNSS			■	■
LoRa	■			
Sub-GHz Transceivers				■
UWB	■			
Wi-Fi	■	■		
Zigbee/Thread/Matter	■	■		
<b>Wireless Sensors</b>				
Pressure				■
Vibration				■



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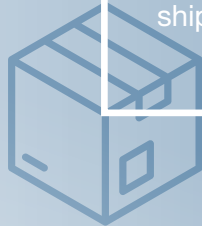
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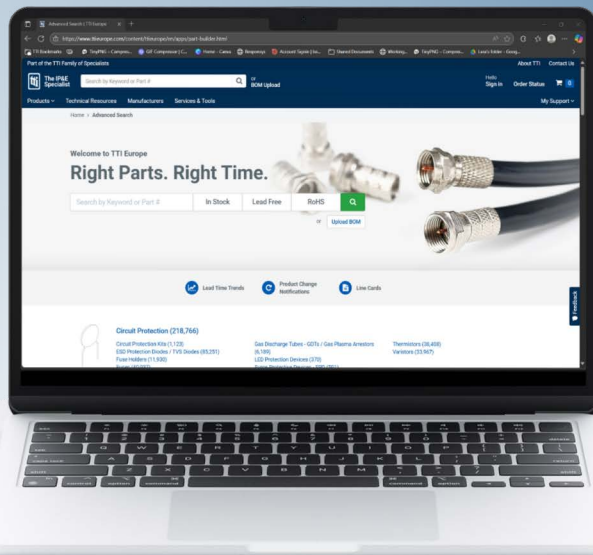
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what a true specialist can offer.

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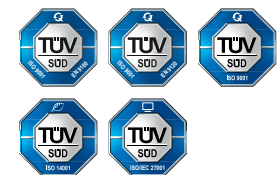
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