



UNIVERSITÀ DI PARMA



TACRI - Tavolo di Coordinamento della Ricerca Industriale di Ateneo

QUALI COMPETENZE PER LA LOGISTICA DEL FUTURO IL CASO ID-SOLUTIONS

Antonio Rizzi, Prof., Eng., Ph.D

Id-Solutions vice Chairman of the Board
Full Professor
Industrial Logistics and Supply Chain Management
University of Parma
RFID Lab, Head and Founder

RFID Lab e Id-Solutions

Una partnership win win



University of Parma
Department of Industrial Engineering
Supply Chain Management

2005



Research Centre

Research, education and tech transf on
RFID applications in business



università di parma
(CAMPUS)



dipartimento
Ingegneria
industriale



Spin off company

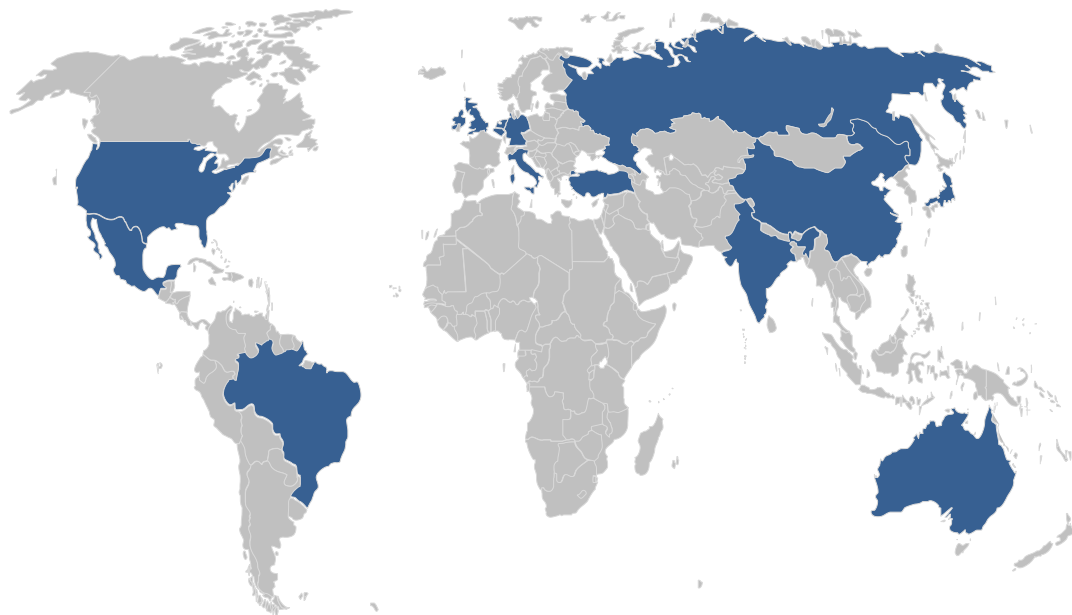
System Integrator &
Solutions Provider



RFID system integrator



Id-Solutions footprint



1000+ devices managed remotely worldwide
150+ customer sites
40+ millions Rfid tags tracked /year

Id-Solutions main customers

Fashion
Apparel



MaxMara

MAX&Co.

MARELLA



LUXOTTICA



THÉLIOS

MARINA RINALDI

PENNYBLACK

Food



Grandi Salumifici Italiani



FERRERO



Healthcare



Manufacturing



MOMO

3PLs



Murata - ID Solutions

June 1st 2017 Id-Solutions joins Murata manufacturing Corporation Ltd

2005

2017



A spin-off company of University of Parma



Murata



Our Business

We are worldwide leaders in the design, manufacture and supply of electronic components and solutions.

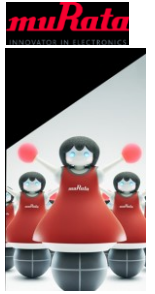
We are Innovators in Electronics.

Our Strengths

- Advanced materials technology and expertise
- Broad product portfolio
- Extensive global manufacturing and sales network

Our Figures









- Net sales 1,371,842 million JPY* (11,5 B€)
- Employees 75,326*
- Number of subsidiaries 99* (30 in Japan, 69 overseas)
- Established in 1944



How many Murata products do you own?

 Capacitors	 Inductors (Coils)	 Noise / EMI suppression products and filters	 Resistors	 Thermistors
 Sensors	 Timing devices	 Sound components	 Power devices	 Micromechanics
 RFIDs	 Matching devices	 RF components	 RF modules	 Batteries
 Ultra low power short range RF-IC	 Filters	 Substrates	 Ionizers/Ozonizers	 Front-end modules

Product category	Typical number of components in					
	Smart Phone	Laptop	Tablet	Automotive	TV	Smart watch
Chip multilayer ceramic capacitors	800	800	600	1000-5000	600	200
EMI suppression filters (EMIFIL®)	100	60	90	300	50	20
Surface acoustic wave filters	4-25		4-25			
Connectivity modules	1	1	1	1	1	1
Shock sensors		1-3		4		
Ceramic resonators				15-20		
Chip inductors	200	30	200	200	30	20
Multilayer devices (Filter, Coupler, Balun, etc.)	2-10		2-5	2-4		1-2
LTCC multilayer substrates				1-2		

 40% Chip monolithic ceramic capacitors	 35% EMI suppression filters (EMIFIL)	 50% Surface acoustic wave filters	 40% Multilayer LC filters (filters, couplers, baluns, etc.)
 60% Connectivity modules	 95% Shock sensors	 75% Ceramic resonators	 30% High frequency inductors

Murata Id-Solutions

June 1st 2017 Id-Solutions joins Murata manufacturing Corporation Ltd

2005

2017



Thanks to the partnership with Murata, **Id-Solutions** is able to develop projects on a global scale with products engineered by Murata based on customer needs



Thanks to the partnership with Id-Solutions, **Murata** is able to offer not only RFID products but also solutions, encompassing consultancy, software, other hardware products and after sales services (RFID Systems)

Two complementary **Research&Compencece Centers**: one on technologies in Kyoto; one on RFID sw and solutions in Parma

RFID in the food chain

Evidence from the field

Grandi Salumifici Italiani & Parmareggio

Deployment

1 Centro di distribuzione + 15 stabilimenti di produzione

Use cases

Automazione e accuratezza delle spedizioni

Automazione ricevimento con ASN

La soluzione

RFID pallet level tagging

Portali RFID sulle banchine di carico scarico

Benefici

- - 50% tempi di carico/scarico - ASN
- 0 pallet disguidati
 - Incremento livello di servizio e vendite grazie alla riduzione dell'out of stock

Grandi Salumifici Italiani®





Id- Solutions s.r.l.

a Murata company

PI 02334000342

Via G. Di Vittorio 46 43044 Lemignano di Collecchio (PR), Italia

T 0521 831205

E customer@id-solutions.it



Antonio Rizzi, Prof., Eng., Ph.D

E antonio.rizzi@id-solutions.it

C +39 320 4370745

Id-Solutions vice Chairman of the Board

Full Professor

Industrial Logistics and Supply Chain Management

University of Parma

RFID Lab, Head and Founder

