

# IMPRES<sup>TM</sup> SMART ENERGY BATTERIES



**TALK LONGER, WORK SMARTER AND SPEND LESS IN THE LONG RUN**



# CHEAP BATTERIES COME WITH A HIGH PRICE

If you buy batteries on the initial purchase price alone, you could end up spending more in the long run. **While other brands may look the same, their quality and performance vary dramatically.** The technology inside makes a big difference in how they impact the performance of your radio and how often they have to be charged.

If you're not using IMPRES™, your batteries may need constant recharging, stop working when your people need them most or even damage your radio. And that's a high price to pay on what you've invested in your valuable two-way radio system.

"In the long run, IMPRES batteries are considerably cheaper than other batteries because they're more reliable and they last longer."

Keith Lippert,  
Communications  
Operations Supervisor  
City of Madison,  
Wisconsin, USA

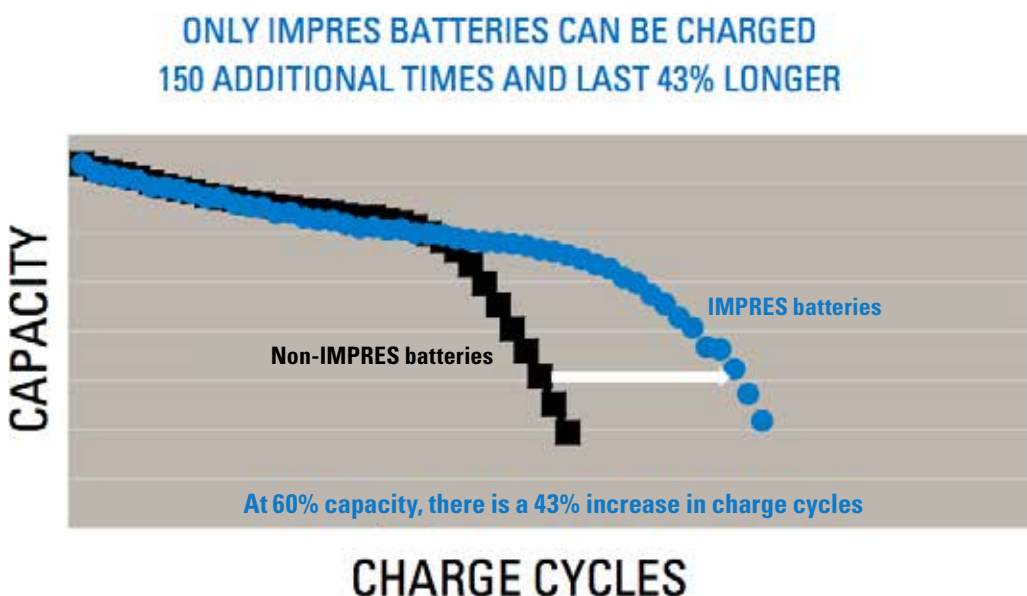
## IMPRES BATTERIES LAST A LOT LONGER, AND SAVE YOU A LOT MORE

Are you buying too many batteries? Many administrators do because they're uncertain if their batteries will work or unsure when they need to be switched out. They replace at predetermined intervals or give workers spare batteries just in case.

Only IMPRES batteries can be charged 150 additional times compared to a standard battery – a 43% increase in charge cycles. If you charge radios two to three times a week, you'll likely get more than an extra year out of every IMPRES battery.

**IMPRES enables you to reduce the number of spare batteries you buy and increase the time before you need replacement batteries.**

Investing in IMPRES is designed to save you money because you buy fewer batteries over the life of the radio and have fewer disruptions to operations.



## IMPRES BATTERIES CAN HELP YOU TALK LONGER AND WORK SMARTER

It's critical for your workers to know that a fully-charged battery will last the entire shift. How do you know which batteries to replace – if you don't have time to put them through an analyzer?

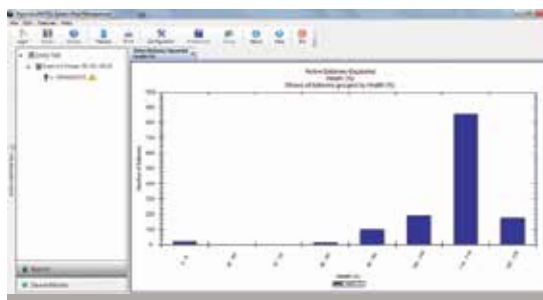
**IMPRES shows you exactly how much capacity is left, so you can squeeze every bit of energy out of IMPRES batteries.**

With IMPRES, you can know battery capacity instantly, because if your radio or charger has a display, it shows you the exact capacity available. You can be more confident your radio battery is ready to go.

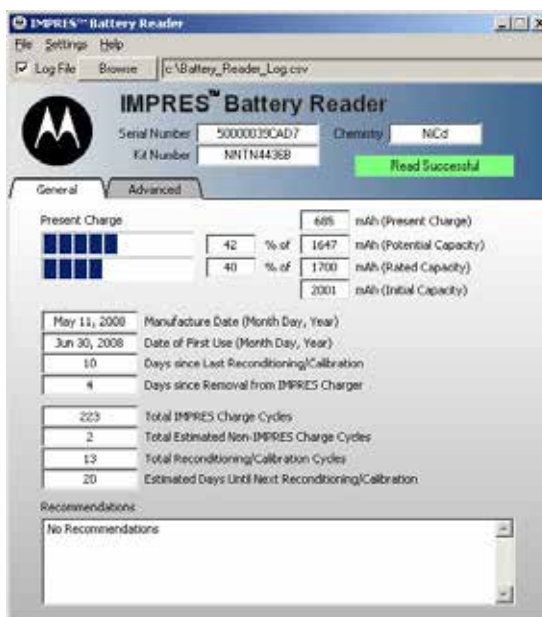
And with the unique IMPRES Battery Reader and IMPRES Battery Fleet Management systems, you can more efficiently manage your batteries with real world data not available with other manufacturers' batteries. These easy-to-use software applications let you know if there is enough capacity for a full shift, alert you to low capacity batteries so you can remove them, prevent downtime and eliminate throwing batteries out prematurely.



**BATTERY INFORMATION AVAILABLE ON THE MOTOTRBO™ DP4800**



**IMPRES BATTERY FLEET MANAGEMENT  
 REAL-TIME ALERTS AND HISTORICAL ANALYSIS**



**IMPRES BATTERY READER**

"Prior to the introduction of the IMPRES Battery Management software, we would tend to replace batteries on an aged basis, now we can monitor their lifespan based on charging cycles and many other statistical characteristics, resulting in less expenditure on replacement battery equipment in the long-term."

Adrian Davies,  
 RF Design Engineer,  
 SFL Mobile Radio  
 Limited, UK

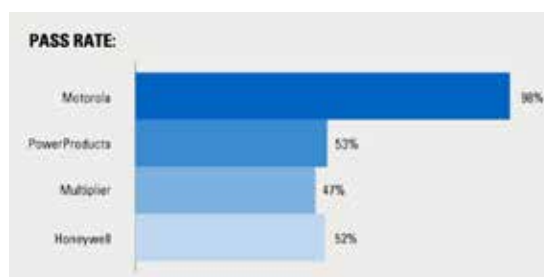
## MOTOROLA BATTERIES PERFORM BETTER TO HELP YOUR WORKERS STAY SAFER

Whether your people are pursuing a suspect or patrolling a power plant, you can't shortchange their safety. Their radio is their lifeline and if the battery fails, so do they.

**Motorola batteries survive day-to-day abuse and the hazards of the workplace.**

In test after test, Motorola batteries out perform the rest – twice as tough as other brands. We design, build and rigorously test every battery to the same high standards as our radios to withstand dust, water, knocks, drops, shocks and more. An innovative circuit design protects against overcharging and electrical shock. And since select Motorola batteries are certified "intrinsically safe" for use with our radios, you can be confident they'll work in the stressful environments of your work place.

Motorola batteries help keep your workforce safer and your costs in check. When you invest in safety and productivity with Motorola and with IMPRES, it does pay off.



RADIO MODELS AND COMPATIBLE IMPRES™ BATTERIES

MOTOTRBO™ DP4000 SERIES

Battery Part Number	Battery Description	Special Features
PMNNA4407	Li-Ion 1600mAh CE	IP57 - Submersible
PMNNA4409	Li-Ion 2250mAh CE	IP57 - Submersible
NNTN8129	Li-Ion 2350mAh CE	IP57 - Submersible, FM Intrinsically Safe

MOTOTRBO DP 3000 SERIES

Battery Part Number	Battery Description	Special Features
PMNNA4101	Li-Ion 1550mAh CE	IP57 - Submersible
PMNNA4103	Li-Ion 2200mAh CE	IP57 - Submersible
PMNNA4102	Li-Ion 1500mAh CE	IP57 - Submersible, FM Intrinsically Safe

MOTOTRBO DP2000 SERIES

Battery Part Number	Battery Description	Special Features
PMNNA4417	Li-Ion 1600mAh CE	
PMNNA4418	Li-Ion 2250mAh CE	

MOTOTRBO DP4000 Ex SERIES

Battery Part Number	Battery Description	Special Features
NNTN8359	Li-Ion 2075mAh CE	IP67 - Submersible, ATEX Intrinsically Safe

These batteries are designed to be charged in the following IMPRES chargers  
WPLN4220 - IMPRES Multi Unit Charger with display (Euro Plug)  
WPLN4221 - IMPRES Multi Unit Charger with display (UK Plug)  
WPLN4219 - IMPRES Multi Unit Charger with display (US Plug)  
WPLN4213 - IMPRES Multi Unit Charger (Euro Plug)  
WPLN4214 - IMPRES Multi Unit Charger (UK Plug)  
WPLN4212 - IMPRES Multi Unit Charger (US Plug)  
WPLN4255 - IMPRES Single Unit Charger (Euro switched mode power supply)  
WPLN4254 - IMPRES Single Unit Charger (UK switched mode power supply)  
WPLN4253 - IMPRES Single Unit Charger (US switched mode power supply)

PROFESSIONAL SERIES

Battery Part Number	Battery Description	Special Features
PMNNA4156	NiMH 2075mAh CE	
PMNNA4159	Li-Ion 2600mAh CE	
PMNNA4157	NiMH 2000mAh CE	FM Intrinsically Safe
HNN4001	NiMH 1900mAh non-CE	
HNN4003	Li-Ion 2500mAh non-CE	
HNN4002	NiMH 1800mAh non-CE	FM Intrinsically Safe

The batteries listed above are designed to be charged in the following IMPRES chargers  
WPLN4194 - IMPRES Display Multi Unit Charger(230V Euro)  
WPLN4193 - IMPRES Display Multi Unit Charger(230V UK)  
WPLN4189 - IMPRES Multi Unit Charger(230V Euro)  
WPLN4188 - IMPRES Multi Unit Charger (230V UK)  
PMLN5188 - IMPRES Single Unit Charger (EU Switch mode power supply)  
PMLN5194 - IMPRES Single Unit Charger (UK Switch mode power supply)  
PMLN5198 - IMPRES Single Unit Charger (US Switch mode power supply)

APX™ 2000

NNTN8128	1900 mAh Li-Ion slim	IP67 - Submersible
NNTN8129	2300 mAh Li-Ion	IP67 - Submersible, Intrinsically Safe
PMNNA4424	2300 mAh Li-Ion	IP67 - Submersible

The batteries listed above are designed to be charged in the following IMPRES chargers  
WPLN4233 - 230VAC 50HZ UK IMPRES Single-Unit Charger  
WPLN4234 - 220VAC 50HZ EURO IMPRES Single-Unit Charger  
WPLN4213 - IMPRES Multi-Unit Charger - EURO Plug  
WPLN4214 - IMPRES Multi-Unit Charger - UK Plug  
WPLN4220 - IMPRES MUC W/DISPLAY - EURO PLUG  
WPLN4221 - IMPRES MUC W/DISPLAY - UK PLUG  
NNTN7616 - IMPRES Vehicular Charger  
NNTN8170 - Insert for WPLN4108/4130 XTS Multi-Unit Charger  
NNTN8169 - Insert for NTN1873/WPLN4111 XTS Single-Unit Charger

For more information on how IMPRES improves performance, visit [www.motorolasolutions.com/emea/impres](http://www.motorolasolutions.com/emea/impres) or find your closest Motorola representative or authorised Partner at [www.motorolasolutions.com/contactus](http://www.motorolasolutions.com/contactus)

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EMEA Version 1 April 2013



APX™ 7000, APX 6000, APX 7000XE, APX 6000XE, SRX2200

Battery Part Number	Battery Description	Special Features
PMNNA4403	2150 mAh Li-Ion slim	IP67 - Submersible
NNTN8092	2300 mAh Li-Ion	Rugged - Submersible, Intrinsically Safe
NNTN7038	2900 mAh Li-Ion	IP67 - Submersible
NNTN7034	4200 mAh Li-Ion high capacity	Rugged - Submersible
NNTN7033	4100 mAh Li-Ion high capacity	Rugged - Submersible Rated to -30 C, Intrinsically Safe
NNTN7035	2000 mAh NiMH	Rugged - Submersible, Intrinsically Safe

The batteries listed above are designed to be charged in the following IMPRES chargers  
NNTN7081 - IMPRES Single-Unit Charger (Euro)  
NNTN7082 - IMPRES Single-Unit Charger (UK)  
NNTN7066 - IMPRES Multi Unit Charger (Euro Plug)  
NNTN7067 - IMPRES Multi Unit Charger (UK Plug)  
NNTN7086 - IMPRES Multi Unit Charger with display (Euro Plug)  
NNTN7074 - IMPRES Multi Unit Charger with display (UK Plug)  
NNTN7624 - IMPRES Vehicular Charger  
NNTN7686 - Insert for WPLN4108/4130 XTS Multi-Unit Charger  
NNTN7687 - Insert for NTN1873/WPLN4111 XTS Single-Unit Charger

ASTRO® DIGITAL XTS® 5000, XTS 3000

Battery Part Number	Battery Description	Special Features
NTN9862	2750 mAh Li-Ion Slim	
NNTN6034	4150 mAh Li-Ion high capacity	Rated to -30 C
NNTN7453	3950 mAh Li-Ion high capacity	IP57 - Submersible, Intrinsically Safe
PMNNA4093	3000 mAh NiMH high capacity	
NNTN4435	1800 mAh NiMH	
NNTN4436	1700 mAh NiMH	Intrinsically Safe
NNTN4437	1700 mAh NiMH	IP57 - Submersible, Intrinsically Safe

ASTRO DIGITAL XTS 2500, XTS 1500

Battery Part Number	Battery Description	Special Features
NNTN7554	2050 mAh Li-Ion slim	IP67 - Submersible
NNTN7335	2700 mAh Li-Ion	IP67 - Submersible
NTN9858	2100 mAh NiMH	
NTN9857	2000 mAh NiMH	Intrinsically Safe
NNTN6263	2000 mAh NiMH	IP67 - Submersible, Intrinsically Safe

All Astro Digital XTS batteries are designed to be charged in the following IMPRES chargers  
WPLN4112 - 220V SUC SMART CHARGER (EURO)  
WPLN4113 - 240V SUC SMART CHARGER (UK)  
WPLN4109 - 220V MUC SMART CHARGER (EURO)  
WPLN4110 - 240V MUC SMART CHARGER (UK)  
WPLN4131 - 220V MUC W/DISPLAY SMART CHARGER (EURO)  
WPLN4132 - 240V MUC W/DISPLAY SMART CHARGER (UK)  
WPLN4208 - IMPRES Vehicular Charger

THE FOLLOWING HARDWARE AND SOFTWARE APPLICATIONS  
SUPPORT ALL IMPRES BATTERIES LISTED

IMPRES Battery Fleet Management

HKVN4037 EMEA IMPRES Battery Fleet Management Entitlement Key  
NNTN7677 Multi-Unit Charger Interface Unit (CIU)  
NNTN8045 Single-Unit Charger Interface Unit (CIU) – not compatible  
with WPLN4111 (XTS Single Unit Charger)

IMPRES Battery Reader

NNTN7392 IMPRES Battery Reader Package – includes battery reader hardware,  
system software, USB cord.

<sup>1</sup> Special Features:  
Ingress Protection (IP) is a global standard for rating dust and water protection. The first digit IP5x or IP6x represents increased levels of dust protection, while the second digit, IPx7 represents withstanding submersion in 1 metre of fresh water for 30 minutes.

Intrinsically Safe: Motorola approved batteries are a critical part of the specific radio and accessory system certified by a recognised testing organisation as ATEX or FM (Factory Mutual) intrinsically safe. Use of non-Motorola approved batteries could result in equipment that is unapproved or unsafe in a hazardous environment.

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