

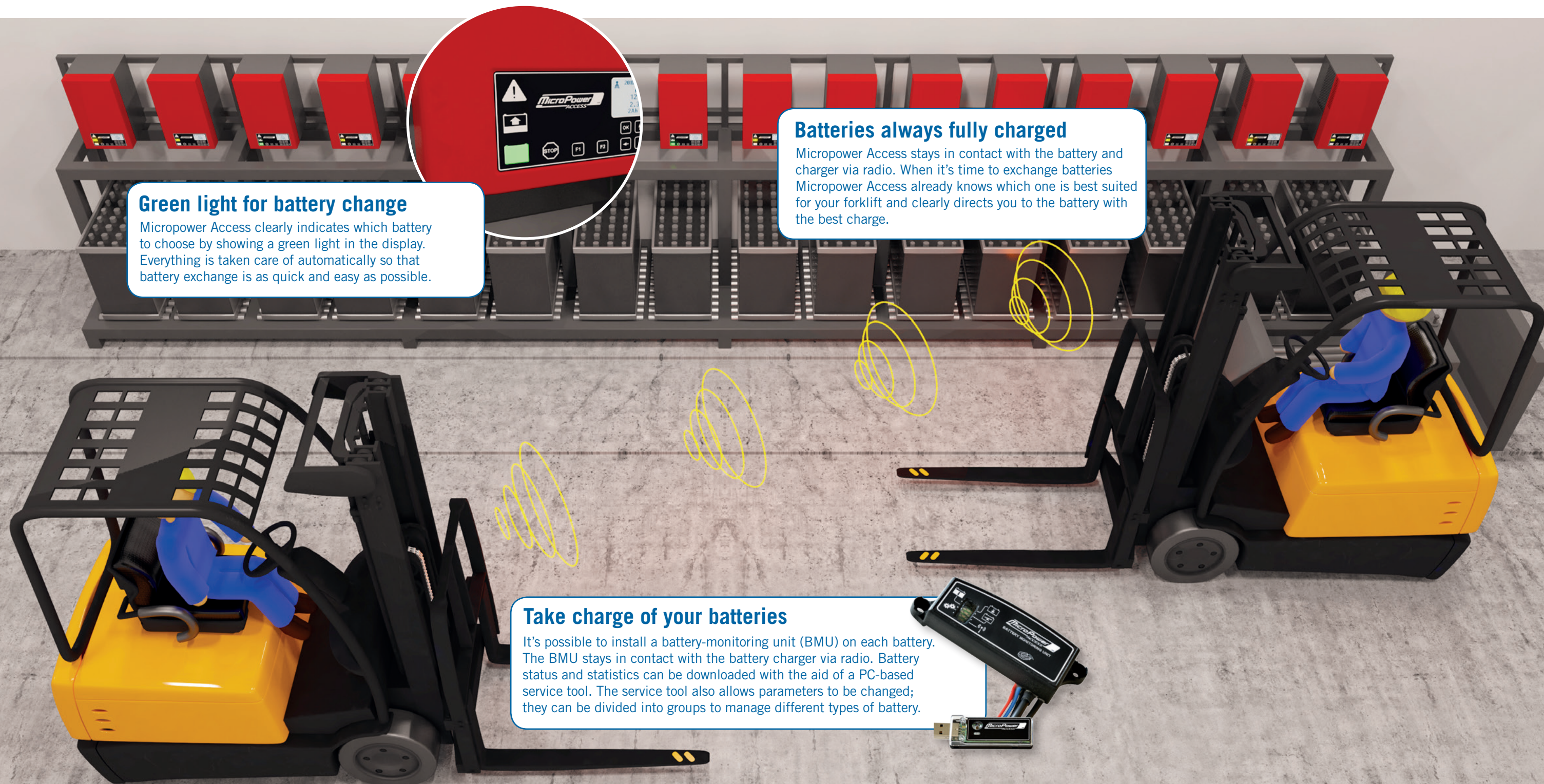
MICROPOWER ACCESS

BATTERY CHARGING SYSTEM WITH MONITORING



Micropower Access – world class battery charging system with prioritization!

Too many batteries are scrapped and replaced early, while far too few get to work to their full potential. Micropower Access allows you to optimize your battery inventory and always choose the one with the best charge. While each exchange takes no extra time, intervals between changes are longer.



Green light for battery change

Micropower Access clearly indicates which battery to choose by showing a green light in the display. Everything is taken care of automatically so that battery exchange is as quick and easy as possible.

Batteries always fully charged

Micropower Access stays in contact with the battery and charger via radio. When it's time to exchange batteries Micropower Access already knows which one is best suited for your forklift and clearly directs you to the battery with the best charge.

Take charge of your batteries

It's possible to install a battery-monitoring unit (BMU) on each battery. The BMU stays in contact with the battery charger via radio. Battery status and statistics can be downloaded with the aid of a PC-based service tool. The service tool also allows parameters to be changed; they can be divided into groups to manage different types of battery.

Micropower Access

– our most effective solution ever

Smart logistics are ever more important, and we all know time is money. More and more companies understand the importance of efficient, friction-free operations in complex warehousing systems. Key words in this context are efficiency and high availability.

Every industry needs to utilize forklifts and other battery-powered equipment as intelligently and cost effectively as possible. Our products and systems deal precisely with efficiency and availability.

Years of research, development and experience in the area have led to our latest monitored battery charging solution. Micropower Access makes sure your efficiency and availability increase.

When you choose Micropower Access you've already taken the first step toward reduced costs through fewer production interruptions and less battery maintenance.

Three important reasons why you should choose Micropower Access.



Service tool (USB)

Battery Monitoring Unit (BMU)

1. Batteries always have optimal charge

Micropower Access keeps track of your battery inventory in several ways. For example, it always makes sure the driver gets the very best battery at the moment of replacement. It takes no extra time for the driver as Micropower Access quickly and efficiently shows which battery to choose when the driver enters the battery charging room. The battery chargers stay in constant contact with each other and select the best battery using the prioritization system – fully charged and ready to go.

2. Avoid unplanned downtime

Micropower Access keeps track of which batteries are ready for the next exchange, thus preventing uneven battery workloads. Repeatedly selecting batteries that are not fully charged wears them out quickly. This may force you to replace worn-out batteries prematurely which entails unnecessary downtime and increased costs. Micropower Access lets you generate reports and download the status of your battery inventory to your PC whenever you want.

3. Safe, efficient rapid chargers

Micropower Access units perform excellently as rapid chargers. They are extremely efficient and it's often enough to charge a battery during a lunch break or between two shifts to reach full capacity. Micropower Access senses the temperature and provides the maximum charge without the risk of overheating. Rapid charging of different types of lithium batteries is becoming increasingly common. These batteries require extra communication between the BMU and the charger and Micropower Access is therefore equipped with CAN bus communications to enable this.

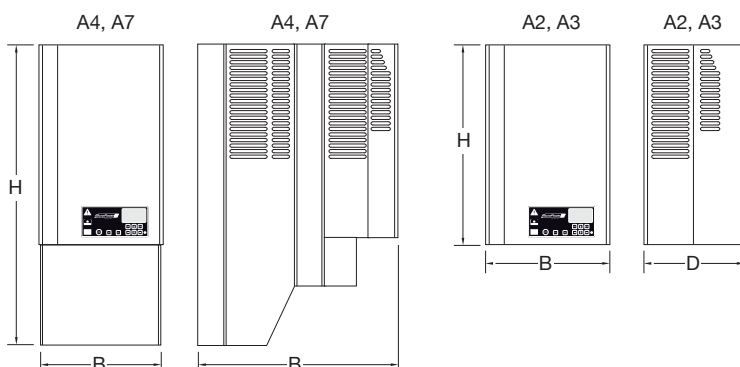
MICROPOWER ACCESS BATTERY CHARGER

Battery charger capacity in respect of battery capacity and available charging time.

Type designation				Recommended battery capacity standard charger		Recommended battery capacity with acid circulation (future)		Number of Phases/Mains current (A) at nominal AC-voltage		Weight kg
				Charging time (IUIU)						
Type	Battery voltage (V)	Current (A)	Cabinet size	8 hours* Cap.Ah/5h	12 hours Cap.Ah/5h	7 hours Cap.Ah/5h	8 hours Cap.Ah/5h	1-phase 220-230 V	3-phase** 400 V	
MP-ACCESS	24	60	A2	371	710	420	498	8.0		10
		80	A2	495	947	560	664	10.7		10
		100	A2	619	1184	700	830	13.4		10
		120	A2	742	1421	840	996	16.0		10
		150	A3	929	1776	1050	1245		7.2	15
		200	A3	1 238	2368	1400	1660		9.6	15
		250	A4	1548	2960	1750	2075		12.0	31
		300	A4	1857	3552	2100	2490		14.4	31
	36	40	A2	248	474	280	332	8.2		10
		60	A2	371	710	420	498	12.0		10
		80	A2	495	947	560	664	16.0		10
		100	A3	619	1184	700	830		7.2	15
		130	A3	805	1539	910	1079		9.4	16
		150	A3	929	1776	1050	1245		10.8	16
		200	A4	1238	2368	1400	1660		14.4	31
		225	A4	1393	2664	1575	1868		16.2	31
		250	A4	1548	2960	1750	2075		18.0	31
		300	A4	1857	3552	2100	2490		21.5	31
	48	40	A2	248	474	280	332	10.7		10
		60	A2	371	710	420	498	16.0		10
		80	A3	495	947	560	664		7.7	15
		100	A3	619	1184	700	830		9.6	15
		130	A3	805	1539	910	1079		12.5	16
		150	A3	929	1776	1050	1245		14.4	16
		165	A3	1021	1954	1155	1370		16.0	16
		200	A4	1238	2368	1400	1660		19.2	31
		225	A4	1393	2664	1575	1868		21.6	31
		260	A4	1610	3078	1820	2158		24.8	31
		320	A7	1980	3789	2240	2656		32.0	31
	72-80	40	A3	248	474	280	332		6.4	15
		60	A3	371	710	420	498		9.6	15
		80	A3	495	947	560	664		12.8	16
		100	A3	619	1184	700	830		15.8	16
		120	A4	742	1421	840	996		19.2	31
		160	A4	990	1539	1120	1328		25.6	31
		200	A7	1238	2368	1400	1660		31.6	31

We reserve the right to make changes without prior notification.

*With our chemical acid circulation (Ionic mixing) the charging time can be about one hour less than the values shown in the table. ** HF-chargers for 3X208-240V, 3X440V and 3X480V are also available.



Dimensions and data:

	Enclosure	H	B	D
1-phase	A2	420	255	150
3-phase	A3	420	255	270
3-phase	A4	625	255	485
3-phase	A7	660	255	485

All enclosures class IP20.
Other classifications available as options.
All dimensions in mm.

THE MICROPOWER GROUP

Micropower is an independent producer of battery chargers and systems for industrial use. Micropower E.D. Marketing AB's head office is located in Växjö, Sweden.

Today the company, which was founded in 1984, is a leading player in the north European market for forklift battery chargers.

The Micropower Group enjoys the great advantage of retaining control over all important production process stages from transformer winding and control card manufacture to inspections and tests prior to delivery to customers. We have customers worldwide.

Micropower E.D. Marketing AB is certified according to ISO 9001 and ISO 14001 standards.

The following companies belong to the Micropower Group:

Parent company:

Micropower Invest AB

Subsidiaries:

Micropower E.D Marketing AB
SEIAB, Smålands Elektronik Industri AB
Primepower AB
Powerfinn Oy
Micropower Fastighets AB
HF SM Power Innovations AB
Ecotec Limited
Micropower Shanghai Ltd