

PXB:2.5 RF B

PORTABLE X-RAY BETATRON



UTILIZING THE POWER OF THE **JME:PBU**

PXB:2.5 RF B PORTABLE X-RAY BETATRON

PIPELINE CRAWLERS · BETATRON PORTABLE X-RAY · DIGITAL RADIOGRAPHY

The **JME PXB:2.5** Portable X-Ray Betatron is now available in a number of configurations to greatly increase its operational use. Including safe, reliable battery operation and RF wireless control.

JME's Wireless Betatron system is compatible with the **PXB:2.5** and is designed to function with both the conventional wired control panel and the innovative wireless handset. Coupled with a **JME** Radio Repeater the user can now operate the system from a range of up to 1,7KM. This has **IMPROVED SAFETY** and allows the Betatron to be used in a greater range of inspection applications.

Our updated touchscreen Control Panel has been developed to incorporate Data Logging, Wireless Connectivity secured with 128bit encryption, a new Intuitive User Interface and optional software for data review via USB.

The Handset allows the user to wirelessly configure the system prior to operation. Providing real time feedback on the status/operation of the system whilst in use. The operator can review and adjust parameters which are key to operation, including the output of the system, exposure time, and both real time and accumulated dose rates. **WITH SAFETY AT THE FOREFRONT OF DESIGN**, the user has continuous access to an emergency stop feature, and in the unlikely event communication is lost, the system will stop any exposure being carried out.

Utilizing the power of the **JME:PBU**, Portable Battery Unit, it is now possible to power the system in locations where mains power isn't available or unreliable. With no reduction in **PXB:2.5** specification or functionality, the **JME:PBU** will give the system 90 minutes of X-Ray on time with only a 2.5 hour charge (per **PBU**). The **JME:PBU** removes the need for flammable liquids on site for use with generators, reduces overall deployment weight, improves access to hard to reach and hazardous locations, while removing the need for maintenance and risk of unplanned break downs.

The **JME:PBU** replaces a standard 230V wall socket and has a rated power output of 3600W, 16A, powering your most demanding equipment. It has a robust and weather-proof IP54+ rating so can work in the most demanding of environments, unaffected by dust or water. The unit can be transported safely simply by enabling Transport Mode, this allows the unit to be shipped in accordance with SP188.

AVAILABLE AS A MOBILE 'BATTERY OPERATED', 'WIRELESS', OR COMBINED SYSTEM.

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EXAMPLE APPLICATIONS

PXB:2.5 RF

PORTABLE X-RAY BETATRON

- EOD/IOD
- ERW/UXO
- OFFSHORE USE
- CONFINED SPACE
(ENABLES EXTERNAL OPERATION)
- THREAT RESPONSE
- WORKING AT HEIGHT
(REDUCED CABLING AND LOGISTICS)
- BRIDGE INSPECTION

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PORTABLE X-RAY BETATRON

- REMOTE LOCATIONS
- RAPID DEPLOYMENT
- UN-RELIABLE MAINS SUPPLY
- SENSITIVE ENVIRONMENTS
(NO GENERATORS / HAZARDOUS CHEMICALS)
- HIGH THROUGHPUT
MAINTANANCE WORK
- GAMMA REPLACEMENT

SYSTEM SUPPLIED IN SEPERATE PELI CASES FOR EASY DEPLOYMENT

TACTICAL/REMOTE DEPLOYMENT OPTIONS
AVAILABLE UPON REQUEST



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PORTABLE X-RAY BETATRON

JME:PBU

PORTABLE BATTERY UNIT

PORTABILITY WITH NO REDUCTION IN PERFORMANCE

TECHNICAL SPECIFICATION

Maximum X-Ray Output	2.5 MeV
Dose Rate at 1m (3.3ft)	>0.7R/minute
Typical Dose Rate @ 1m (3.3ft)	1R
Focal Spot Size	0.2 x 2.0 mm
Duty Cycle Radiation Beam	75% per hour
Beam Coverage	350 x 350mm @ 1m
Radiographic Sensitivity	Down to 1%
Supply Voltage	Single-phase, 110V or 220V, 50/60Hz
Adjustment Range of Energy	1.0 to 2.5MeV in 0.1MeV increments
Power Consumption	1.0kW (4.5A @220V, 9A @ 110V)
Standard Cable Length	PSU to Radiator 5m - PSU to Control Panel 15m Mains Supply to Power Unit 5m
Generator	Recommended 6kVA Please contact JME for more information.

OPERATING STATE: DISCHARGING

Output voltage	230 VAC / 50 Hz	European grid standard
Rated power	3.600 W / 16 A	RMS
150% overload (5,400 W / 24 A)	Operation for >500 s possible	RMS
200% overload (7,200 W / 32 A)	Operation for >50 s possible	RMS
250% overload (9,000 W / 40 A)	Operation for >10 s possible	RMS
Peak Power	18.000 W / 80 A	RMS
Maximum short-circuit current	500 A (peak)	Peak
Maximum operating time (idle)	150 h	
Line protection	16 A – similar to „B16“ circuit breaker	
Permitted operating temperature	-20°C to 60°C	

OPERATING STATE: CHARGING

Input voltage	120-240 VAC / 50-60 Hz	RMS
Rated power	500-1.000 W / 4 A	Voltage independent current consumption/ RMS
Charge time	< 3h to 100%	At 230 VAC and 25°C ambient temperature
Permitted operating temperature	0°C to 45°C	

GENERAL INFORMATION

Battery capacity	2.074 Wh	
Weight	20 kg	
Dimensions	420 x 210 x 420 mm	
IP Class	IP54	Water and dust proof
Protection class	Class II / double-insulated	According to IEC 61140
Noise emission	< 10 dB(A)	Silent
Storage	> 3 years	

CONNECTIONS

Output socket	BS1363-2 (13 A)	
Output socket	Neutrik powerCON TRUE1® TOP®	
Load input	Neutrik powerCON TRUE1® TOP®	Incl. charging cable
Input fuse	T5A L 250 V	

FOR FULL DETAILS OF ALL AVAILABLE COMPONENTS AND SYSTEMS www.jme.co.uk
Individual datasheets available for all components

DIMENSIONS AND WEIGHT

Accelerator (Radiator)	440 x 300 x 150mm	31kg
Power Unit	445 x 245 x 390mm	20kg
Control Panel	305 x 275 x 150mm	4.2kg
Pulse Converter	415 x 205 x 240mm	10.5kg

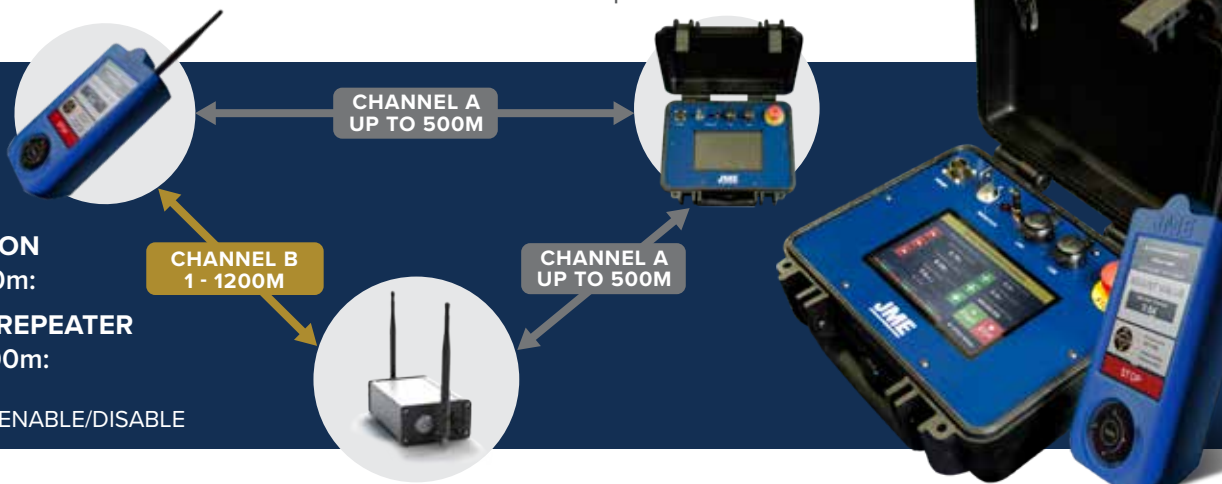
PXB:RF

PORTABLE X-RAY BETATRON

DIRECT COMMUNICATION
– typical range up to 500m:

COMMUNICATION VIA REPEATER
– typical range up to 1,700m:

PASSWORD PROTECTED RF ENABLE/DISABLE



SALES AND MANUFACTURING
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