ALXIII RM WORKSTATION

Available as a single-channel, two-channel or four-channel unit, the ALXIII RM Workstation is becoming the workhorse for the international oil and gas pipeline industry. Supplied with voltage and current measurement on all channels as standard, it allows customisation to each channel with a variety of optional combinations. With all the facilities of the ALXIII Portable in a rugged wall or rack mounting cabinet, the ALXIII Workstation is a versatile and cost effective system.

A rugged, hard working unit designed to withstand the tough conditions of the working environment, it is equally at home monitoring welding procedures, qualifying welders, or in a laboratory situation where precision welding of fine components and exotic materials requires an accurate data logging system.

Specific pipeline software allows a complete welding procedure, from root to cap, to be pre-programmed so that a single Workstation can monitor the whole weld or to monitor preset weld passes in different stations. ALXIII RM Workstations can be networked together so a single master station can be created, able to correlate all welding data into a single report.

The powerful pulse monitoring software option can be fitted to some or all channels in a single unit. Monitoring and reporting complex welding pulses presents no problems, as the Workstation's speed and processing capacity to produce instant reports of each weld pass, no matter how complicated the waveform. Special software packages are available which enable the full integration of several ALXIII RM Workstations to produce units of eight channels, and above.

- Mains powered 90 - 220 V AC 50/60 Hz
- Single channel as standard (option to add further channels)
- Non-intrusive probes
- Monitors voltage and current as standard
- Options for wire feed, gas flow, travel speed, type 'K' contact temperature measurement, purge oxygen level, wireless laser depth measurement, wireless multi-channel temperature measurement, wireless travel speed and wireless wire feed tachometers
- Optional pulse monitoring and analysis software package
- Complete WPS programmable from root to cap
- TIG H.F. protected
- Network connection and USB ports
- Wireless connectivity
- Cladding/weld overlay specific operation and software packages
- Pipeline specific operation and software packages
- Auxiliary inputs configured to customer specification

ALXIII Portable

Applications	MMA/MIG/TIG (AC/DC)/Subarc/Fluxcore
Techniques	Manual/Semi-Auto/Fully-Auto/Robotic
Dimensions	24.5cm (W) x 22cm (H) x 33cm (D)
Weight	14.5Kg
Battery Type	Sealed Lead-Acid (Rechargeable)
Battery Charger	External to 260 V AC (3 Hour Recharge)
Temperature Range	0 - 55˚C
Printer	40 Character Internal Dot Matrix (User Selected Print Rate)
Screen	12.1" Full Colour Touchscreen TFT
Keyboard/Mouse	Full Size 65 Key with Trackball IP65
Memory	240Gb SSD
Connectivity	3 x USB, 1 x Ethernet, and 1 x 802.11a/b/g/n WiFi

ALXIII RS

Applications	MMA/MIG/TIG (AC/DC)/Subarc/Fluxcore
Techniques	Manual/Semi-Auto/Fully-Auto/Robotic
Dimensions	24.5cm (W) x 22cm (H) x 33cm (D)
Weight	14.5Kg
Battery Type	Sealed Lead-Acid (Rechargeable)
Battery Charger	External to 260 V AC (3 Hour Recharge)
Temperature Range	0 - 55˚C
Printer	40 Character Internal Dot Matrix (User Selected Print Rate)
Screen	User Defined
Keyboard/Mouse	User Defined
Memory	240Gb SSD
Connectivity	3 x USB, 1 x Ethernet, and 1 x 802.11a/b/g/n WiFi

ALXIII RM Workstation

Applications	MMA/MIG/TIG (AC/DC)/Subarc/Fluxcore
Techniques	Manual/Semi-Auto/Fully-Auto/Robotic
Dimensions	45.5cm (W) x 38cm (H) x 45cm (D)
Weight	18Kg
Power	Mains powered 90 - 260 V AC Input with Internal Sealed Lead-Acid (Rechargeable) Battery Back Up
Temperature Range	0 - 55˚C
Printer	Up to 4 x 40 Character Internal Dot Matrix
Screen	17" Full Colour Touchscreen TFT
Keyboard/Mouse	USB External Full Size 89 Key with Mousepad
Memory	320Gb
Connectivity	3 x USB, 2 x Ethernet, and 1 x 802.11a/b/g/n WiFi

Monitored Parameters

Average Current	15 - 1999A +/-2% fsd +/-1 digit
Average Voltage	0 - 99.9V +/-1% of fsd +/-1 digit
Arc Energy	1 - 9999kJ +/-2% fsd +/-1 digit
Arc Time	0.3 - 9999secs +/- 0.1% fsd +/-1 digit
Heat Input	1 - 9999J/mm +/-2.5% of fsd +/-1 digit
Wire Speed	0 - 30.0m/min +/- 2.5% +/-1 digit
Wire Consumed	0.1 - 9999m/min +/- 2.5% fsd +/-1 digit
Traverse Speed	0.1 - 999cm/min +/-11.0% fsd +/-1 digit
Temperature	0 - 1000˚C +/-1% of reading +/-1 digit
Gas Flow	1 - 120Lt/min +/-5.0% fsd +/-1 digit
Oxygen Level	1 - 50,000ppm (0.0001 - 5%) +/- 0.0001% fsd +/-1 digit
Weld Depth (Laser)	0.1 - 75mm +/-0.1 fsd +/-1 digit

2 x Auxiliary Input are available and can be customised to suit client requirements

Advanced Welding Data Logging and Monitoring Systems

ALXIII SERIES

TVC

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Overview

Available as a portable unit for operation in remote locations, as a multi-channel workstation, or a rack-mount system for use with a remote keyboard and monitor, the ALXIII Series can fulfil all welding data logging requirements. The advanced software and electronics on the ALXIII also allows the monitoring, capture and analysis of pulsed welding processes.

In standard operation the ALXIII Series is capable of monitoring all the main welding parameters - voltage, current, wire feed speed, travel speed, gas flow and temperature - and will produce reports of average values for all parameters, plus heat input calculations and total consumables used.

Once in pulse mode, the ALXIII Series will give instantaneous values of peak and background levels for voltage and current as well as producing a graphical display for detailed pulse analysis. Pulse mode complies with all requirements of ASME IX (2015), EEMUA Publication 158 (Third Edition) and PD ISO/TR 18491:2015 for the measurement and recording of Instantaneous Power on Welding Power Sources that are Pulsed Current and Waveform Controlled Processes.

The Portable system is powered by a rechargeable lead acid battery pack that can be swapped over without the need of shutting the system down, allowing continuous operation in the field.

The mains powered ALXIII RM Workstation can offer continuous monitoring in a production environment for up to four welding heads from a single unit.

ALXIII PORTABLE

The ALXIII Portable is a "go-anywhere" battery powered unit capable of monitoring all types of arc welding in the workshop or remote location.

Facilities to monitor all the main arc welding parameters makes the ALXIII Portable the most user friendly and versatile welding data logger and reporting system available today.

Using the standard software package, the unit can monitor voltage, current, wire feed speed, travel speed, gas flow, temperature, purge oxygen levels, hot wire current and voltage parameters producing average figures for all parameters, plus automatic heat input and energy calculations.

The ALXIII Portable system as standard can only monitor one welding power source, however, if fitted with the optional additional input channels, the ALXIII Portable can simultaneously monitor up to four welding power sources. This makes it an ideal system for the field measurement of Twin Torch Twin Bug Pipeline Welding systems or, alternatively, for monitoring GTAW equipment with Hot Wire facility.

Switch to the optional pulse mode and it has the capacity to monitor complex welding waveforms with absolute accuracy, producing high quality reports. The analysis facility measures peak and background values of voltage and current. Pulse mode complies with all requirements of ASME IX (2015), EEMUA Publication 158 (Third Edition) and PD ISO/TR 18491:2015.

The on-board printer produces a hard copy print right at the welding location which, combined with the unit's reporting software package, gives the welding/QC engineer the facility to produce instant weld reports and specifications at the point of welding.

The ALXIII Portable can be used on all popular arc welding processes and is protected against damage from the high frequency/high voltage start systems used on many TIG welding power sources.

The unit and accessories are supplied in a single rugged protection case, which can be shipped internationally by road, sea or air transportation.

- Battery or mains powered
- Up to 3 hours charge from a single lead acid battery pack
- Non-intrusive probes
- Monitors voltage and current as standard.
- Options for wire feed, gas flow, travel speed, type 'K' contact temperature measurement, purge oxygen level, wireless laser depth measurement, wireless multi-channel temperature measurement, wireless travel speed and wireless wire feed tachometers
- Optional pulse monitoring and analysis software package
- Complete WPS programmable from root to cap
- TIG H.F. protected
- "Intelligent" battery charger
- Network connection and USB ports
- Wireless connectivity
- Cladding/Weld Overlay specific operation and software packages
- Pipeline specific operation and software packages
- Auxiliary Inputs configured to customer specification

ALXIII RS

In pulse mode, the ALXIIl RS will give instantaneous values of peak and background levels for voltage and current as well as producing a graphical display for detailed pulse analysis. It can measure, display and calculate instantaneous energy and heat input. Pulse mode complies with all requirements of ASME IX (2015), EEMUA Publication 158 (Third Edition) and PD ISO/TR 18491:2015 for the measurement and recording of Instantaneous Power on Welding Power Sources that are Pulsed Current and Waveform Controlled Processes.

When used with an external monitor and keyboard, it is an extremely portable system which can deliver up to four hours of monitoring time from the rechargeable internal battery.

The ALXIII RS can be used on all popular arc welding processes and is protected against damage from the high frequency/high voltage start systems used on many TIG welding power sources.

Rugged, hard-working and designed to withstand the tough working environment and conditions, it is equally at home monitoring welding procedures, qualifying welders or in a laboratory situation where precision welding of fine components and exotic materials requires an accurate data logging system.

The unit and accessories are supplied in a single rugged protection case, which can be shipped internationally by road, sea or air transportation.

- Battery or mains powered
- Up to 3 hours charge from a single lead acid battery pack
- Non-intrusive probes
- Monitors voltage and current as standard
- Options for wire feed, gas flow, travel speed, type 'K' contact temperature measurement, purge oxygen level, wireless laser depth measurement, wireless multi-channel temperature measurement, wireless travel speed and wireless wire feed tachometers
- Optional pulse monitoring and analysis software package
- Complete WPS programmable from root to cap
- TIG H.F. protected
- "Intelligent" battery charger
- Network connection and USB ports
- Wireless connectivity
- Cladding/weld overlay specific operation and software packages
- Pipeline specific operation and software packages
- Auxiliary inputs configured to customer specification

ALXIII RS

ALXIII Portable