# RANGER
# 6500

## *"intelligent"*
## Remote Display



- **6 x 75mm flip-flop digits**
- **multi-segment design**
- **status annunciators**
- **extreme reliability**
- **weatherproof**
- **fast updates**

Australian Made – Two Year Warranty

**Not only is the 6500 a very capable remote display, but it also supports Ranger-Net protocols as a network slave, master or as a summing unit for multiple Ranger indicators.**

**The 6500 has dual serial ports supporting RS-232/422/485 and 20mA serial current loop to allow it to display data from digital weight indicators, PC's / PLC's and other communications devices.**

**Setup is performed digitally using PCB mounted buttons and reading the display (similar to digital weight indicators). It can also be done via the serial ports on a Windows based PC using the innovative Ranger 6500 Viewer software.**

The individual segments have minimal mass to enable fast switching speeds to be achieved together with extreme reliability. These digits aren't effected by external vibration or shock forces that sometimes cause other types of electro-magnetic digits to fail or to be set incorrectly - the coil cores maintain their magnetic state until they are switched again.

There are three annunciators available to show indicator functions like "Motion", "Centre of Zero" and "Net" mode. The digit segments are arranged into 3 columns of 5 to allow all numeric and most alpha characters to be displayed.

The 6500 will accept a power input between 85 to 264VAC & 47 to 63Hz – completely auto-selecting. This makes it very suitable for use in industrial environments where power and/or frequency fluctuations occur.

As well as fully supporting the RANGER-NET networking protocol, the 6500 can be used in both MODBUS ASCII and PROFIBUS (requires external module) networking environments.

The 6500's maximum viewing distance is approximately 40 metres, allowing it to be used on most applications requiring a remote display. The digits are a fluorescent yellow on a black background for easy viewing under all lighting conditions.

There is in-built trade compatibility to most brands of digital indicators available on the market, including:

- **RANGER**
- **METTLER TOLEDO**
- **A/D MERCURY**
- **GEDGE**
- **BARLO**
- **PHILIPS**
- **LODEC**
- **AVERY-BERKEL**

**The 6500 can also be manually configured on-site to accept data from other indicators or devices if the serial data format is known.**

The housing is a sturdy aluminium extrusion, sealed to IP66 rating with a laminated shatterproof glass window. The total weight is only 3.4 kg and stainless steel mounting brackets are supplied with the unit.

Case dimensions (in mm) are 600 L x 148 H x 78 D.

| PERFORMANCE | |
|---|---|
| Display | 6 electromechanical digits, 75mm high with 15 segments per digit for displaying numeric and semi-alpha characters<br>Status annunciators for Motion, Centre of Zero & Net mode (when connected to Ranger indicators) |
| Visibility | Up to 40 metres |
| Update Rate | 10Hz |
| Operating Environment | Temperature -10 to +50°C,  humidity < 90% non condensing |
| **DIGITAL** | |
| Setup | Full digital with visual prompting in plain messages |
| Memory retention | Full non-volatile operation |
| **SERIAL COMMS** | |
| Primary Port Formats | RS-232/422/485 – two wire (receive only)<br>20mA serial current loop two wire (receive only)<br>RS-232/422/485 – four wire (receive and transmit for networking) |
| Primary Port Features | Remote display, Ranger-Net slave, master and summing master, Modbus ASCII slave |
| Secondary Port Formats | RS-232/422/485 - two wire (receive only)<br>RS-232/422/485 - four wire (receive and transmit for networking) |
| Secondary Port Features | Network slave and Modbus slave. |
| **DIMENSIONS** | |
| Body Size (mm) | 600 (L) x 148 (H) x 78 (D) |
| Display Window (mm) | 430 x 100 |
| Weight (kg) | 3.4 |
| Power Supply (AC) | 85 - 264VAC  47 - 63 Hz  15W |
| **FEATURES** | |
| | Status annunciators for Motion, Centre of Zero & Net mode |
| | P.C. programmable using Ranger Viewer software |
| **APPROVALS** | |
| | Complies with S1/0 for auxiliary devices |
| | C-Tick (N2708) |
| **OPTIONS** | |
| | Summing software for up to 10 Ranger indicators |
| | Modbus ASCII networking protocol |
| | Profibus networking protocol (requires external module) |
| | Swivel mounting bracket with weather hood |