

Tealware can be used as local I/O, and can also be used remotely over ModbusTCP Ethernet for distributed, or larger applications. For local I/O, a Smart SoftPLC is used. For remote I/O, any SoftPLC or other ModbusTCP capable controller can be used, and a Smart Adapter is used at each remote drop.

Local I/O

A Smart SoftPLC provides a high speed local interface to Tealware I/O. You can scan thousands of points in under 1 msec! Two configuration options are available:

(1) Any three (3) Tealware modules can mount directly onto a Smart SoftPLC equipped with a Backplane3 interface (Cat Nos SMS11-B-x).



Smart SoftPLC w/ Backplane3 Interface



Smart SoftPLC w/ Backplane3 - Tealware Modules mounted

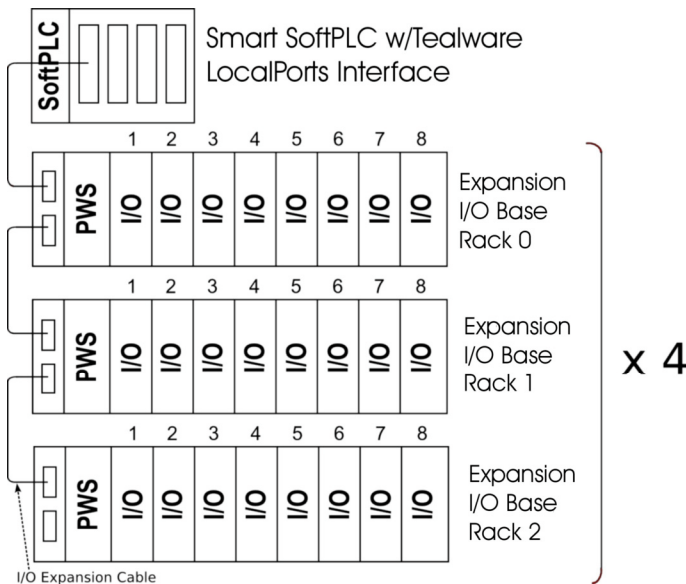
(2) If more than (3) modules are needed, a Smart SoftPLC equipped with a LocalPorts interface is used. The LocalPorts interface has (4) I/O Base ports. I/O Bases connect to the Smart SoftPLC via these ports, using I/O Expansion Cables. Up to (3) I/O Bases can be connected to each port. In this configuration, up to 12 I/O Bases (96 I/O modules) are supported for a maximum of 3072 local I/O points, up to 30 feet from the Smart SoftPLC!



Smart SoftPLC w/ LocalPorts Interface

Expansion I/O cables (Cat No EXCBLxx) are used to connect from the I/O Base port(s) on the LocalPorts interface to an I/O Base, and from one I/O Base to another. Available cable lengths are 2', 4', 6 and 10'. The maximum total distance from the Smart SoftPLC to the last expansion I/O base is 30 feet.

Each I/O Base port on the Smart SoftPLC w/ LocalPorts system (Cat No SMS11-L-x) can connect to up to 3 bases, up to 30 feet from CPU to last base.



Smart SoftPLC connected to I/O Rack via I/O Expansion Cable



Remote I/O

A Smart Adapter provides the connection between a Tealware I/O Drop and a ModbusTCP capable controller, such as a SoftPLC. A SoftPLC supports up to 127 remote Tealware drops.

Two Adapter configuration options are available:

(3) Any three (3) Tealware modules can mount directly onto a Smart Adapter equipped with a Backplane3 interface (Cat Nos SMA11-B).



Smart Adapter w/
Backplane3 Interface



Smart Adapter w/
Backplane3 - Tealware
Modules mounted

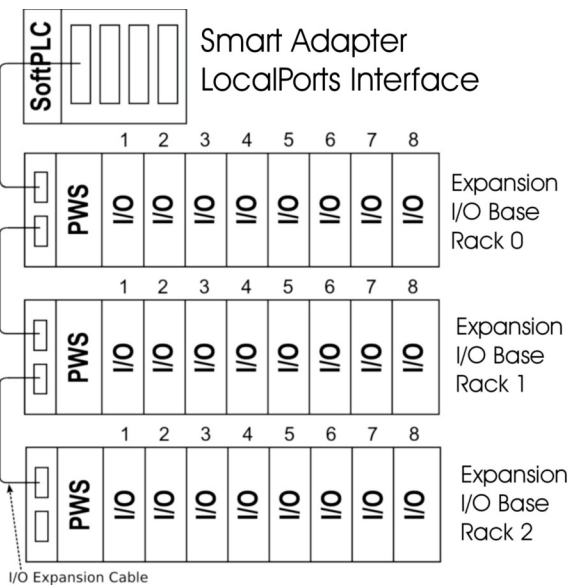
(4) If more than (3) modules are needed, a Smart Adapter equipped with a LocalPorts interface is used (Cat Nos SMA11-L). In Adapter mode, only one of the I/O Base ports can be used. I/O Bases connect to the Smart SoftPLC via this port, using an I/O Expansion Cable. Up to (3) I/O Bases can be connected to a Smart Adapter. This configuration supports up to 24 I/O Modules are supported for a maximum of 3072 local I/O points, up to 30 feet from the Smart SoftPLC!



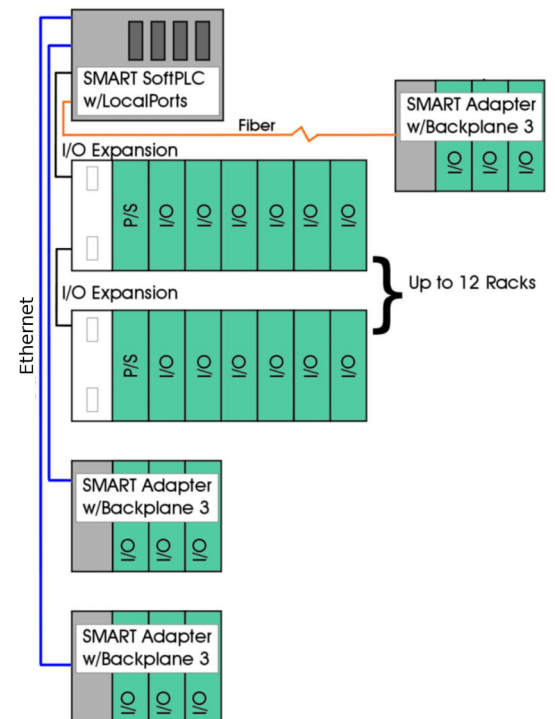
Smart Adapter w/
LocalPorts Interface

Expansion I/O cables (Cat No EXCBLxx) are used to connect from the I/O Base port on the LocalPorts interface to an I/O Base, and from one I/O Base to another. Available cable lengths are 2', 4', 6 and 10'. The maximum total distance from the Smart Adapter to the last expansion I/O base is 30 feet.

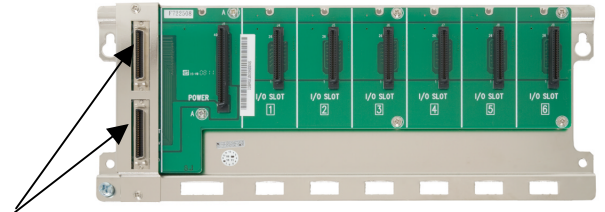
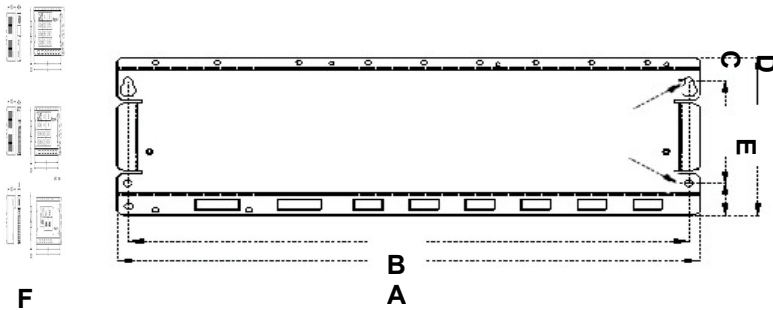
One I/O Base port on the Smart Adapter w/ LocalPorts system (Cat No SMA11-L) can connect to up to 3 bases, up to 30 feet from Adapter to the last base.



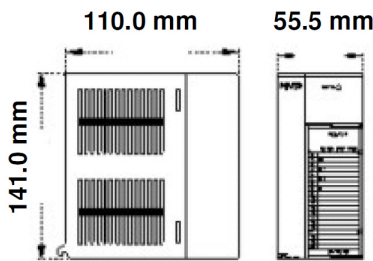
Example Configuration



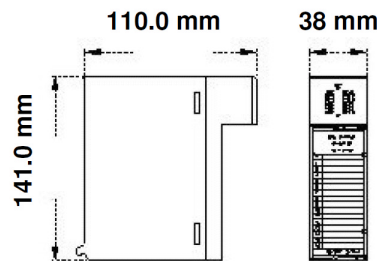
Tealware Expansion I/O Base Dimensions							
Cat. No.	I/O Module Slots	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F(mm)
IOBASE06	6	345	330	91.5	141	28.5	25
IOBASE08	8	421	406	91.5	141	28.5	25



Connectors for Expansion I/O Cable (Cat No EXCBLxx)



Power Supplies



I/O Modules



Expansion I/O Cable
(Cat No EXCBLxx)

xx = length, options
are 02, 04, 06 and 10

Electrical and Environmental Specifications	
Ambient operating temperature	-20 to 60 Celsius
Ambient storage temperature	-20 to 85 Celsius
Airflow clearance	50.8 mm (2 inches) above and below unit for ambient airflow
Humidity	5~90% non-condensing
Electrical noise immunity	1,500 volts peak to peak, 1 μ s noise width at 30 to 100Hz
Vibration resistance	10 to 55Hz, amplitude 0.075mm for 60 minutes
Shock resistance	10g 3 times in 3D directions
Dielectric withstand voltage	1500 volts AC for 1 min. across AC ext. terminal and ground
Impedance	75M Ω at 500 volts DC
Electrical Safety	Class 2 grounding
Operating atmosphere	Non-corrosive atmosphere with minimum dust
Certifications & compliance	UL, UL(C), CE rated

